Assessment of the Areas of Exceptional Archaeological and Historical Importance, Exmoor National Park

Ralph Fyfe and Heather Adams

School of Geography

University of Plymouth

Assessment of the Areas of Exceptional Archaeological and Historical Importance, Exmoor National Park

Ralph Fyfe and Heather Adams

School of Geography, University of Plymouth, Plymouth, PL4 8AA

ralph.fyfe@plymouth.ac.uk tel: 01752 233129

Report prepared on behalf of Exmoor National Park Authority, November 2008

Executive summary

This report presents the results of a review of the Areas of Exceptional Archaeological and Historical Importance (AEAHIs) drafted in 2004 as part of the Moorlands at a Crossroads survey undertaken for the Exmoor Society. It integrates palaeoecological research and potential into the designation of these areas and incorporates the results of survey and excavation on Exmoor since 2004.

The report recommends the acceptance of thirty-seven AEAHIs which include landscapes that best represent the diversity of the archaeology of the moorlands. In addition it has developed a database of known palaeoecological sites and a separate database of high potential palaeoecological sites.

A scheme for assessing the condition of these areas is proposed using forms suited to repeat volunteer survey. The approach assesses the individual significant elements that comprise each AEAHI, assigning each a condition score using an objective threat-led methodology. The individual scores are averaged to provide an indication of the state of the AEAHI.

Contents

Project background4
2004 AEAHI designations and criteria for inclusion
Aims and objectives
The palaeoecological database8
Assessment of existing AEAHIs and palaeoecological potential10
Recommendation of AEAHIs13
Revised AEAHI descriptions13
Condition criteria and monitoring template for AEAHIs
Recommendations for further work
Acknowledgements
Appendix 1: Gazetteer of palaeoecological sites
Appendix 2: Radiocarbon dates from Exmoor palaeoecological sequences
Appendix 3: Relevant Research Aims from "The Archaeology of South West England: South West Archaeological Research Framework, Resource Assessment, and Research Agenda" (Webster 2007)
Appendix 4: Condition monitoring forms
Appendix 5: Condition keys for the assessment of condition of elements within AEAHIs45
References

List of Figures and Tables

Figure 1: Definition of moorland on Exmoor, 2008. Numbers indicate the moorland unit as defined in Landuse Consultants (2004).	5
Figure 2: Distribution of AEAHIs designated in 2004 (Wilson-North and Riley, 2004).	7
Figure 3: Location of analysed palaeoecological sequences on Exmoor. Radiocarbon dated sequences are distinguished as filled circles. Refer to Appendix 1 for site details.	9
Figure 4: Extent of extensive peat-depth survey and location of areas of palaeoecological potential identified within this project.	12
Figure 5: Recommended AEAHIs. Summary details can be found in Table 1	14
Figure 6: Example of completed monitoring form	37
Table 1. Principle components of the archaeology of Exmoor within each recommended AEAHI	15
Table 2: Detail of threats to the historic environment on moorlands (adapted from Fyfe, 2000; Wilson-North and Riley, 2004; Fyfe, 2006; OAN, in prep.)	34

Project background

The Exmoor Moorland Initiative seeks to prioritise work to conserve, enhance and interpret Exmoor's moorlands. As part of this, Exmoor National Park Authority has won a Landscape Partnership (the Exmoor Moorland Landscape Partnership) development funding grant from the Heritage Lottery Fund. Part of the development work within this HLF funded Landscape Partnership is to delimit Areas of Exceptional Archaeological and Historical Importance (AEAHIs), in particular building on an earlier model and incorporating palaeoenvironmental importance into the designation of areas. The earlier AEAHIs were a product of the Moorlands at a Crossroad report (Landuse Consultants, 2004) commissioned by the Exmoor Society to review the future of Exmoor.

The designation of AEAHI is in recognition of the significance of the archaeology of Exmoor. The archaeology of the moorland is exceptionally well preserved, making the resource as a whole of national significance. Although approximately 10% of archaeological sites on Exmoor are designated as Scheduled Ancient Monuments (SAMs) and are thus offered statutory protection, this model of archaeological protection is focussed entirely on sites rather than sites in their landscape context. This context is what the designation of AEAHIs seeks to conserve, putting in place a structure which allows for preservation and monitoring of the most important parts of the archaeology of the moorland.

The relict prehistoric landscapes are nationally and possibly internationally significant. They form a rare and very extensive survival of entire past landscape across the domestic, social, economic and spiritual spheres. These types of landscapes are practically non existent in southern England and are rare across the country as a whole. The upstanding remains of these prehistoric landscapes makes them accessible to the visitor in a way that the overwhelming majority of lowland, flattened sites in private ownership are not. The association of palaeoecological deposits is an integral part of the historic environment, preserving an environmental archive and the potential for tremendous preservation potential of sites within or underneath these deposits. Certain monument types (e.g. stone settings) are unique to Exmoor.

The combined evidence for medieval farming and settlement across the moorland is at least of regional significance and in some instances national importance. The extent and preservation of remains is exceptional, in particular where settlements, field systems and palaeoenvironmental deposits exist in close spatial proximity. The evidence of postmedieval reclamation and exploitation of mineral resources is nationally significant in terms of economic and industrial history. The very character of the moorland in areas such as Larkbarrow and Tom's Hill is a result of the process of enclosure and exploitation in the nineteenth century.

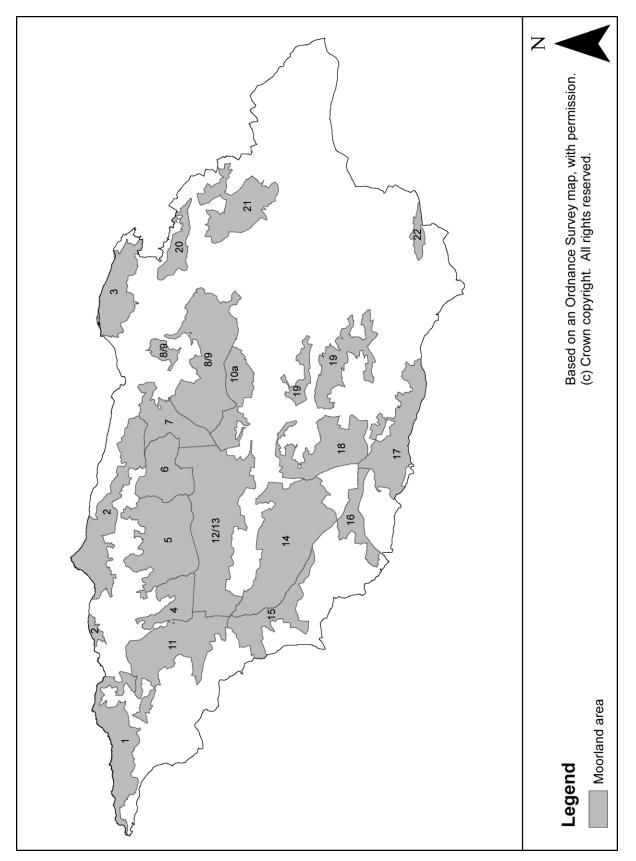


Figure 1: Definition of moorland on Exmoor, 2008. Numbers indicate the moorland unit as defined in Landuse Consultants (2004).

The moorland line on Exmoor that is used within this project is a refinement of that developed within in Landuse Consultants (2004). The report used a combination of the Section 3 moor and heath and Defra's moorland line (defined as LFAs which are predominantly upland vegetation used for rough grazing). At the time of the study digital transcriptions of open access land under the CROW act was not available and thus was not included. Landuse Consultants divided the moorland area into 22 units grouped into five sets (coastal heath, northern heather moors, grass moors of the centre, southern heather moors and the Brendon heaths). The definition used here is a result of refinement of these moorland units by ENPA to incorporate recently enclosed moorland (Figure 1). This results in a total of 283 km² of moorland, representing 40% of the total area of ENP.

2004 AEAHI designations and criteria for inclusion

In 2004 Wilson-North and Riley prepared the first designations of AEAHIs as a contribution to the Moorland at a Crossroads report (Landuse Consultants 2004). Forty-eight AEAHIs were designated which were designed to reflect the most important elements of the archaeology of the moorland. The areas were designated against the following criteria:

1. *Numbers*. Areas which included an unusual number, or concentration, of a particular type of monument or monument group

2. *Associations*. Areas where monuments can be shown to be associated with other groups of monuments, especially spatially or (more unusually) temporally.

3. *Completeness*. Areas where the survival of archaeological features is such that a relict landscape of a particular period is preserved, in a largely undamaged form, in a discrete area.

4. *Complexity*. Areas where the survival of archaeological features is such that sites of different time periods are preserved.

5. *Special degree of preservation*. Areas where the degree of survival of archaeological remains is unusually high.

6. *Special or unique to Exmoor*. Areas which make a special contribution to telling the story of Exmoor's past.

7. *Contributing significantly to the character of the landscape*. Areas where the nature of the archaeology contributes directly to the landscape character.

There was no minimum or maximum size of area established, or any target of the proportion of the moorland that should be included within the areas. The 2004 areas cover a total area of 34.1km², approximately 11% of the moorland on Exmoor. Their 2004 distribution is given on Figure 2.

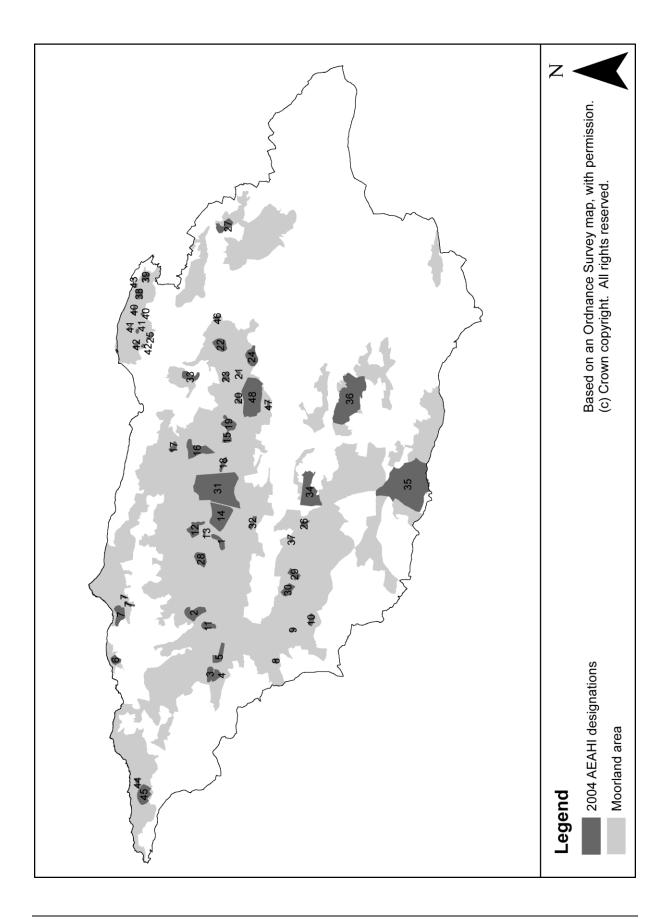


Figure 2: Distribution of AEAHIs designated in 2004 (Wilson-North and Riley, 2004).

Aims and objectives

This project has two main aims. First, to review the designation of AEAHIs within Exmoor National Park, and in particular to incorporate palaeoecological sites (either proven or by potential) into the designation criteria. Second, to establish criteria for the evaluation of the condition of these areas for the continued conservation of their character and archaeological, historical and palaeoecological value.

The following objectives were established in order to achieve the stated aims of the project:

1. Establish a GIS database of all existing palaeoecological data from within Exmoor National Park

2. Review the current designation of AEAHIs including the incorporation of palaeoecological potential and value.

3. Make recommendations for revised designation of AEAHIs.

4. Review methodologies for assessment of condition of monuments and landscapes on British uplands, and make recommendations of best practice based on these.

The palaeoecological database

The palaeoecological database was compiled through a desktop review of all published and grey literature which included palaeoecological analysis within the National Park boundary. These records were written as a spatial database in GIS including the following metadata: (i) site name; (ii) NGR of sites/cores; (iii) analyst and level of experience; (iv) year of analysis; (v) palaeoecological proxies examined; (vi) whether the site has a chronology; (vii) reference for the work. In addition to the archive of sites, all radiocarbon dates were included in tabular form.

Palaeoenvironmental research on Exmoor began in the 1970s with the doctoral thesis of Dave Merryfield (1977). Merryfield undertook survey of the extent of blanket peat on Exmoor and developed several pollen diagrams from blanket mire sequences. This work established the potential of the blanket mire sequences, and provided the first map of peat depths on the upland. In the late 1980s further pollen work was undertaken around the prehistoric field systems at Codsend and Hoar Moors (Francis and Slater, 1990; 1992). In the late 1990s the doctoral work of Fyfe (2000) included targeted survey of small wetlands on Exmoor, and was followed in the early 2000s by a Leverhulme Trust-funded

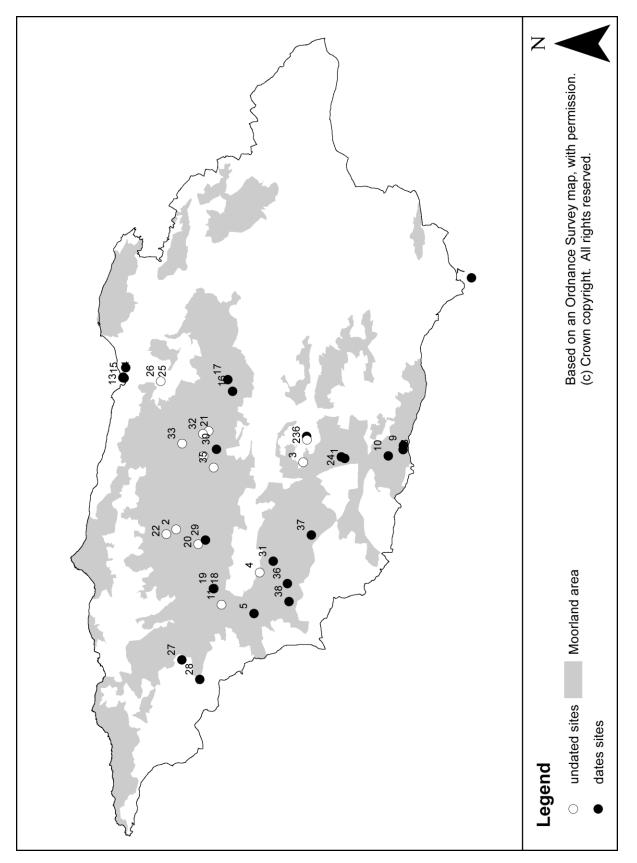


Figure 3: Location of analysed palaeoecological sequences on Exmoor. Radiocarbon dated sequences are distinguished as filled circles. Refer to Appendix 1 for site details.

palaeoenvironmental project across what was described as Greater Exmoor (Fyfe *et al.*, 2003; Rippon *et al.*, 2006). In 2005 Exmoor National Park Authority commissioned the University of Exeter to undertake extensive survey of palaeoenvironmental potential within part of the moorland area (Fyfe, 2005), and from 2007 have been partners in a PhD examining conservation issues around palaeoecology, including extensive field-based survey as a continuation of the work of Fyfe (2005). In addition to these formal projects, site-specific undergraduate dissertations have been undertaken across Exmoor since the late 1990s from the Universities of Exeter, Plymouth and Bristol.

As a result of this history of palaeoecological research on Exmoor, a total of 38 palaeoecological sequences are known from within the boundary of the National Park (Figure 3; Appendix 1), of which 17 are published (this number includes 4 separate sequences from Porlock Marsh). Twenty-two of these sequences are radiocarbon dated, with a total of 64 radiocarbon dates from them (Appendix 2). There is considerable variation in temporal coverage represented within the 22 dated sequences, with few sites extending back as far as the Mesolithic or Neolithic periods.

The overwhelming palaeoenvironmental proxy studied on Exmoor is pollen, which has been undertaken at all sites. In addition, diatom analysis has been undertaken at Porlock Marsh, testate amoebae analysis from Moles Chamber, and macrofossil analysis from recent sections on Lanacombe and Larkbarrow. Geochemical analysis has been undertaken from three sections (North Twitchen, Roman Lode and The Chains), and several sections have been analysed for novel dating approaches, in particular tephrochronology.

Assessment of existing AEAHIs and palaeoecological potential

The existing AEAHIs were reviewed against the condition criteria established in the 2004 briefing paper (Wilson-North and Riley, 2004) and discussed in a series of meetings with appropriate English Heritage and Exmoor National Park Authority staff. A desk-based survey of recent (post-2004) advances in archaeological knowledge and survey alongside existing knowledge (Riley and Wilson-North, 2001) was used to inform this review process. Key advances are those from the surveys of Jamieson (2003, 2005), Riley (2007), the Lanacombe stone settings (Mark Gillings, pers. comm.) and the ongoing review of Codsend (Hazel Riley, pers. comm.). Results from the on-going National Mapping Programme were incorporated for those areas where survey is complete, and in particular the Selworthy area (Cain Hegarty, pers. comm.).

Areas of palaeoecological potential were established and mapped based on (i) the palaeoecological database established through the project; (ii) compilation and examination of data from existing extensive surveys of peat depth and palaeoecological potential; (iii) a

review of 1946 black and white, 1977 near infra red, 2003 full colour aerial photography and 1:10000 OS mapping. These areas of palaeoecological potential were limited as polygons in GIS and integrated into the designation of AEAHIs where this was deemed appropriate (i.e. they added considerable potential or understanding to the understanding of the archaeology of the area). A separate layer based purely on palaeoecological potential has also been defined.

The field-based survey datasets which were made available to assess the palaeoecological potential of the moorland were:

(i) Merryfield (1977): map of peat depth contours from peat depth survey (GIS digitized version taken from Fyfe, 2005)

(ii) Extensive peat-depth survey undertaken in 2003 as part of an MSc dissertation (Bowes, 2003) [24.5 km² covered]

(iii) Field survey of the palaeoecological potential of moorland units 7 and 11 (Fyfe, 2005) [31.6 km² covered]

(iv) Field survey data from on-going doctoral work at the University of Plymouth (Adams, in prep.) [49.6 km² covered]

(v) Field notes from the Leverhulme Trust-funded Greater Exmoor project [16.0 ${\rm km}^2$ covered]

In practice it proved to be almost impossible to judge the presence or absence of peat from aerial photography alone, even in areas with known palaeoenvironmental sequences. This is a result of insufficient visual difference in the character of the vegetation that characterise dry heath and mires on Exmoor at the present time, even using NIR imagery. Although the presence of drainage ditches on the moorland was thought to offer useful insights into the presence or absence of peat, often these drains extended into areas of shallow peat, making delineation of high potential sites very difficult. As a result the main sources that have been employed are the dataset of existing work and the results of the field survey work, in particular those of Bowes (2003), Fyfe (2005) and Adams (in prep.), which cover some 122 km² of the moorland. The implications of this are that there may be areas outside those with intensive survey which have high palaeoecological potential that cannot be identified through desk-based work.

As a result of the assessment of palaeoecological potential 34 areas with high palaeoecological potential have been identified, mostly lying within the areas of extensive survey (Figure 4). The database for these 34 areas of palaeoecological potential includes data on (i) the method of identification of the area; (ii) the relevant extensive survey dataset used; (iii) a short rationale for inclusion; and (iv) whether there is a spatial relationship with an AEAHI.

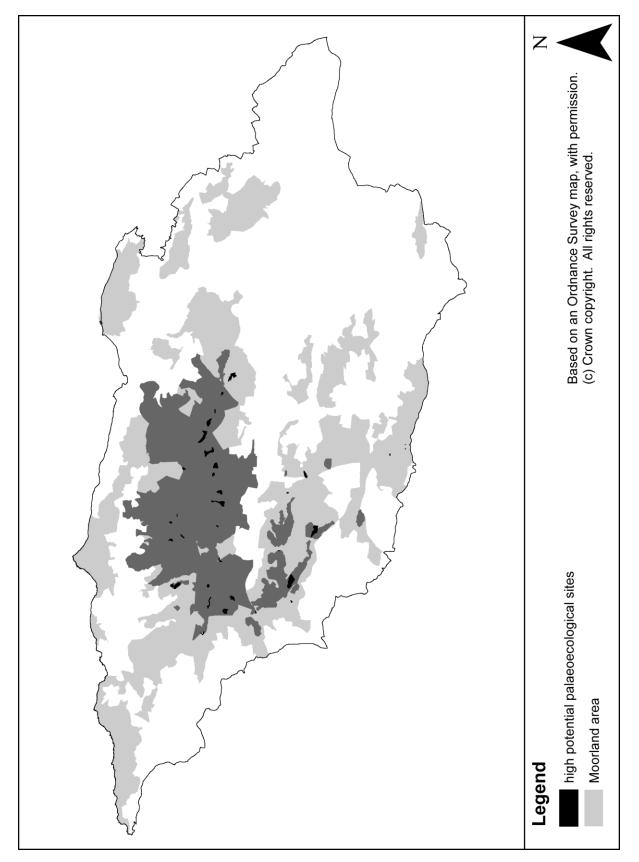


Figure 4: Extent of extensive peat-depth survey and location of areas of palaeoecological potential identified within this project.

Recommendation of AEAHIs

Following review of the 2004 AEAHIs, integration of areas of palaeoecological potential, and review of more recent advances in knowledge within the archaeology of the moorland, it is recommended that 37 AEAHIs be adopted by Exmoor National Park (Figure 5; Table 1). Each area has been considered using the original 2004 criteria. Each of these is detailed below, and summarised in Table 1. The boundaries of these have been mapped as polygons with the following attribute data: (i) AEAHI UID; (ii) AEAHI name; (iii) short description; (iv) long description; (v) grouping.

A full description of the rationale for designation of each area and the significant archaeology within each is given in the next section.

Revised AEAHI descriptions

Within these descriptions reference is made to the South West Archaeological Research Framework (SWARF) Research Agenda (Webster, 2007). Full details of the Research Aims can be found within the SWARF document (Webster, 2007 [www.somerset.gov.uk/swarf]). The relevant SWARF Research Aims are detailed here in Appendix 3.

1: Lanacombe

Reason for designation

Lanacombe lies within a broader area covering Badgworthy Water which preserves the densest concentration of early prehistoric stone settings on Exmoor (17 currently known within this broader area). Six very well preserved settings are known within the designated Lanacombe area. The area also includes fragmentary prehistoric field systems and banks.

Significance

The Lanacombe AEAHI includes an unusual concentration of stone settings which are associated spatially with fragmentary prehistoric field systems. The preservation of the settings is exceptionally good for Exmoor and as such they make an important contribution to understanding the prehistory of Exmoor. They have the potential to address SWARF research aims 49 and 54. The settings and their landscape context are the focus of ongoing survey and excavation by a team from the Universities of Leicester and Bristol (Gillings, Taylor and Pollard).

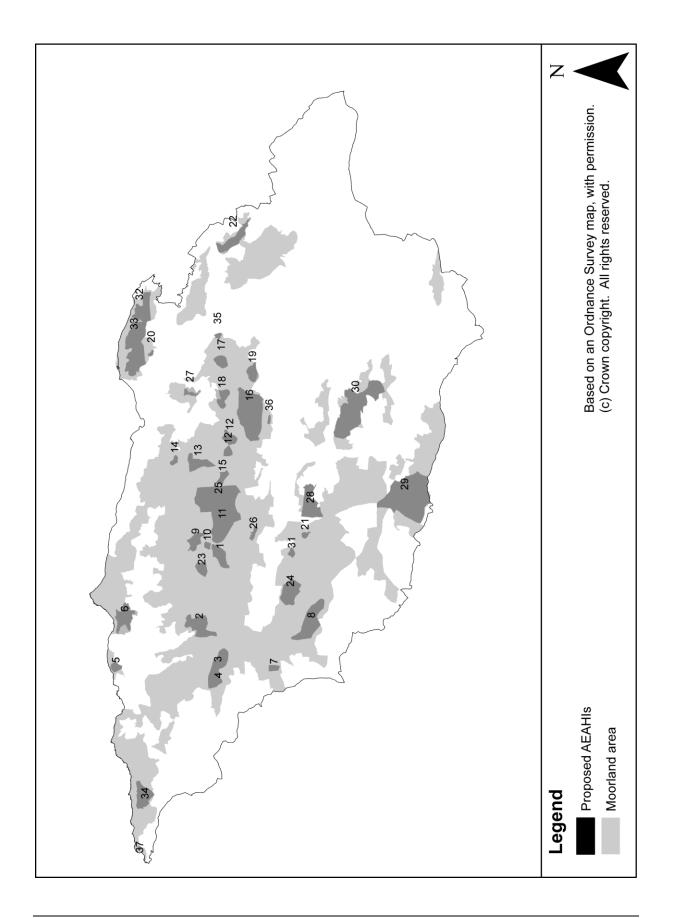


Figure 5: Recommended AEAHIs. Summary details can be found in Table 1

#	Name			ary n		ntal
		storic	eval Jg ns	ment sure/ natio	ک ا ھر	o- onme
		Relict prehistoric landscapes	Medieva farming systems	Parliamentary enclosure/ reclamation	Military training l	Palaeo- environmental
1	Lanacombe	٧				
2	Furzehill	V				
3	Chapman Barrows and Woodbarrow complex	v				
4	Radworthy		V			
5	Valley of the Rocks	V				
6	Countisbury and Lyn Gorge	V				
7	Shoulsbury	V				
8	Setta Barrow, Five Barrows and Two Barrows	V				v
9	Badgworthy		V			
10	Badgworthy Hill	V				
11	Trout Hill and Pinford	V				v
12	Great Hill and Honeycombe Hill	v				v
13	Porlock Allotment	V				
14	Hawkcombe Head	v				
15	Aldermans Barrow and Madacombe	v				v
16	Codsend and Dunkery	V		V		v
17	Robin and Joaney How	v				
18	Sweetworthy	V	V			
19	Mansley Combe	V	V			
20	Bury Castle	V				
21	Cow Castle	V				
22	Bat's Castle	V				
23	Brendon Common				V	
24	Blue Gate and Roman Lode			V		
25	Larkbarrow and Tom's Hill	V		V		V
26	Warren Farm			V		
27	Ley Hill	V	V			
28	Pickedstone		V			
29	Molland Common		V			V
30	Winsford Hill		V			
31	Wheal Eliza			V		
32	North Hill		v			
33	Selworthy WWII ranges				v	
34	Holdstone Down	V		v		
35	Brockwell Pits	V				
36	Kitnor Heath	V				
37	Little Hangman	v				

Table 1. Principle components of the archaeology of Exmoor within each recommendedAEAHI

2. Furzehill

Reason for designation

The area encompasses Furzehill and Thorn Hill and has been designated primarily as an area of exceptional prehistoric archaeology. Recent English Heritage survey has significantly added to the range of complexity of monuments in this area (Riley, 2007). The principal components of the archaeology within the AEAHI are fragments of prehistoric field systems, clearance cairns and settlements across the whole area, stone settings, stone rows and cairns, and a high potential peat system across the top of Furzehill Common.

Significance

This area is a small part of a series of open heaths running broadly south-north which enclose prehistoric landscape contexts. The complexity of the prehistoric archaeology is exceptional and the spatial association of different monuments classes and an area of high palaeoecological potential is unusual on Exmoor. Riley's (2007) survey demonstrates that much of the prehistoric landscape is largely complete and relatively undamaged. It is an area that can make a significant contribution to understanding the prehistory of Exmoor. The area has the potential to contribute to SWARF research aims 10, 40, 49 and 54.

3. Chapman Barrows and Woodbarrow complex

Reason for designation

This AEAHI comprises a complex of funerary and ceremonial prehistoric monuments and extends from Two Gates to Woodbarrow Gate. The principal components of the archaeology are two extensive linear barrow cemeteries (Chapman Barrows, the Woodbarrow group), an exceptional massive isolated standing stone (the Longstone) and at least three stone settings.

Significance

The AEAHI contains an exceptional concentration of prehistoric funerary monuments (at least 13 large barrows or cairns and a further 4 smaller barrows or cairns) which contribute significantly to the character of the landscape as highly visible ridge top monuments. Such linear cemeteries are unusual on Exmoor. The association of these funerary monuments with stone settings, and in particular the Longstone, is remarkable and there are few other areas on Exmoor which contain the spatial relationship between stone settings and barrows to the same extent. The Longstone itself is an unusual monument within the archaeology of Exmoor. The area has the potential to contribute to SWARF research aims 49 and 54.

4. Radworthy

Reason for designation

The AEAHI contains a complete deserted medieval farmstead and its associated relict field system which is mentioned in the Domesday Survey. The outfield of this farming system is likely to be preserved within AEAHI 3 (Chapman and Woodbarrow complex).

Significance

The AEAHI encloses a complete relict landscape of the medieval and post-medieval period in a largely undisturbed form. It provides a special contribution to understanding farming history and medieval enclosure and agriculture within the region, in particular at the margins of cultivation. The area has the potential to contribute to SWARF research aims 42 and 47.

5. Valley of the Rocks

Reason for designation

The AEAHI contains an extensive prehistoric field systems and settlements. The principal components of the archaeology are the remains of cairns, hut circles and strip fields on steep slopes. These are preserved within the small pocket of coastal heath near Lynton.

Significance

The significance of the archaeology within the AEAHI lies in the completeness of the prehistoric landscape within a clearly defined and cohesive area. The visibility of the archaeology is high and the degree of preservation is exceptional for a prehistoric field system on Exmoor. As such it holds a significant role for communicating aspects of the prehistory of Exmoor, in particular within one of the most visited parts of the National Park. The area has the potential to contribute to SWARF research aims 10 and 40.

6. Countisbury and Lyn Gorge

Reason for designation

This AEAHI contains a complex of late prehistoric and medieval settlement. The area includes the promontory fort at Wind Hill, the largest Iron Age enclosure on Exmoor (35 ha). The other major prehistoric sites within the AEAHI are two hillslope enclosures (Myrtleberry North and Myrtleberry South). Myrtleberry North is one of a handful of hillslope enclosures which include outworks. The hillslope enclosures are assumed to be Iron Age; however, recent excavation at Higher Holworthy (Parracombe) has suggested that at least some of

these may date to the Bronze Age (Terry Green, pers. comm.). The AEAHI is also designated for the remains of medieval farming and settlement. Extensive medieval strip lynchets are preserved within the enclosure at Wind Hill. More importantly is a spectacular deserted medieval settlement at Horner's Neck on a spur end. The AEAHI also includes the remains of post-medieval trial pits and adits for iron exploration.

Significance

The medieval complex at Horner's Neck is in an exceptional position and an unusual site type on Exmoor. In itself it has high potential to contribute to SWARF research aims 30 and 42. The later prehistoric monuments demonstrate an unusual concentration of enclosures which are preserved in a largely undamaged form.

7. Shoulsbury

Reason for designation

The AEAHI contains one of the seven hillforts on Exmoor (Shoulsbury Castle). In addition, it includes a newly discovered stone setting (Jamieson, 2005) and the remains of a barrow within the hillfort. It is also located close to the palaeoecological sequence at Moles Chamber which, although it lies outside the boundary of this AEAHI, contains palaeoenvironmental data directly relevant to the period of use of the hillfort (Fyfe, 2000).

Significance

Shoulsbury Castle is one of only seven hillforts on Exmoor and only three are within the moorland area. Nationally, it represents a good example of an Iron Age hillfort with excellent preservation of the earthworks of the site and at 450 m OD is one of the highest hillforts in England. It thus has a special contribution to the understanding of late prehistory on Exmoor and beyond. The location of the site makes a distinct contribution to the character of the landscape, with spectacular views of Barnstaple Bay, Dartmoor and Bodmin. The relationship with the round barrow in the interior may imply an earlier date for the use of the site. The area has the potential to contribute to SWARF research aims 40 and 54.

8. Setta Barrow, Five Barrows and Two Barrows complex

Reason for designation

The AEAHI includes at least 26 barrows stretching along the ridge from Squallacombe to Hangley Cleave along the modern county boundary between Devon and Somerset. The barrows have traditionally been grouped into three main sets: Setta Barrow (9), Five Barrows (actually 9) and Two Barrows (actually 7) with barrows in between (e.g. at Kinsford Gate). The barrows are highly visible, well preserved and show a variety of constructional forms. The AEAHI also includes the White Ladder stone row (at 420 m the longest row on Exmoor) that has a direct topographic association with the linear spread of barrows. The AEAHI boundary has been drawn to include the established palaeoecological sites at Comerslade (Fyfe *et al.*, 2008) and North Twitchen Springs, both of which are temporally associated with the significant monuments within the area.

Significance

The AEAHI is significant as it includes a large number of barrows showing a variety of constructional forms which are well preserved, there is a clear spatial association of these barrows to the White Ladder stone row, and there is a clear temporal association with the palaeoecological sites at Comerslade and North Twitchen Springs. As such, the area has a special role in describing the changing funerary practices in prehistory and the landscape context within which these practices took place. The high visibility of the linear barrow cemeteries makes a direct contribution to the character of the landscape along this ridge between Bray Common and Hangley Cleave. The area has the potential to contribute to SWARF research aims 1, 10, 18, 25, 49 and 54.

9. Badgworthy

Reason for designation

The AEAHI is designated as a result of the survival of one of the finest pieces of undisturbed medieval landscape in south west England. The medieval complex comprises 15 structures surrounded by the extensive earthworks of an infield and outfield system, including well preserved ridge and furrow. Outside the boundary of the AEAHI the palaeoecological site in Hoccombe Combe preserves a palaeoenvironmental record of changing land use and land management within the settlement.

Significance

The Badgworthy medieval landscape is important for a number of reasons. It is the most complete survival of a medieval deserted settlement, including buildings and field systems, on Exmoor and one of the best within the wider region, and the remains of the extensive earthworks are preserved exceptionally well. It is association with RD Blackmore's novel *Lorna Doone*, and as such it plays a very significant role in defining the landscape character of Exmoor. The area has the potential to contribute to SWARF research aims 30 and 42.

10. Badgworthy Hill

Reason for designation

The AEAHI includes two very well preserved prehistoric enclosures, and the remains of a medieval long house and associated fields on the slope above Hoccombe Water. The fields preserve ridge and furrow.

Significance

The two prehistoric enclosures are unusual on Exmoor in terms of their size and construction, the western-most enclosure being around 23 m in diameter. The medieval settlement and field system, and in particular the ridge and furrow, is well preserved. The area is significant for the survival of this complex of unusual sites and has the potential to contribute to SWARF research aims 30, 40, 42 and 54.

11. Trout Hill and Pinford

Reason for designation

The AEAHI is a landscape area which includes a complex of early prehistoric monuments. It is part of the more extensive Badgworthy Water prehistoric landscape (continued to the west in AEAHI 1 [Lanacombe]). A total of 8 stone settings are currently known (Riley, 2007), but unlike the Lanacombe AEAHI Trout Hill and Pinford also includes 8 cairns, an enclosure, a hut circle and fragments of prehistoric field banks. To the south of the boundary of the AEAHI there are two palaeoecological sites.

Significance

The Trout Hill and Pinford AEAHI includes some of the best associations of prehistoric monuments on Exmoor in significant numbers. The close spatial relationship between the stone settings, cairns and field systems and their density is very unusual. This is an area which makes a significant contribution to understanding the prehistory of Exmoor. The two palaeoecological sites beyond the boundary of the AEAHI offer huge potential to add to the association of monuments and landscape history. The complexity of monuments and their density mean that the area has significant potential for contributing to a range of the SWARF research aims, in particular 40, 49 and 54.

12. Great Hill and Honeycombe Hill

Reason for designation

The AEAHI contains some of the most complete prehistoric field system evidence on Exmoor preserved as visible banks, alongside hut circles. The field systems appear to be more developed than some others on Exmoor: on Great Hill three hut circles are sited in association with fields including strip lynchets, with two burial cairns outside the system. Although Honeycombe Hill is more fragmented the remains of two hut circles are associated with what appear to be well-planned terraced field banks, close to one of the few stone rows preserved on Exmoor. A high potential palaeoecological site is located within the AEAHI which preserves deep peat, and a further high potential palaeoecological site is associated with the AEAHI, although not included within the boundary, within Embercombe, which preserves some of the deepest peat on Exmoor.

Significance

The field systems and associated monuments on both Great Hill and Honeycombe Hill are amongst the best examples of complete, contained, prehistoric communities on Exmoor. The proximity of high potential palaeoecological sites adds considerably to the conservation value of these landscapes. The completeness of the monument complexes is such that these landscapes offer tremendous potential to offer insights into farming and social practice in early prehistory within the wider region, contributing directly to SWARF research aims 1, 10, 40, 49 and 54.

13. Porlock Allotment

Reason for designation

The AEAHI is designated as a prehistoric landscape which preserves an exceptional density of settlement sites and ritual monuments in close spatial proximity. The area includes one of the two stone circles on Exmoor and one of the nine stone rows in close proximity. Eight hut circles lie within the area, clustered in twos and threes. Around these hut circles are fragments of field banks, with associated funerary monuments.

Significance

The archaeology within this AEAHI contains high settlement density which is unusual on Exmoor. The clustering of hut circles implies small communities collected together in a larger landscape (broadly defined as Porlock Allotment). The prehistoric landscape is largely complete, including domestic sites, field banks and ritual monuments, which again is unusual for Exmoor. The completeness of the monument complexes is such that these landscapes offer tremendous potential to offer insights into farming and social practice in early prehistory within the wider region, contributing directly to SWARF research aims 10, 40 and 49.

14. Hawkcombe Head

Reason for designation

The AEAHI encloses the late Mesolithic hunter-gatherer site at Hawkcombe Head. This site contains the largest collection of late Mesolithic tools collected on Exmoor and ongoing survey and excavation has revealed evidence for settlement activity at the site (Gardiner, 2007a, 2007b).

Significance

The remains of late Mesolithic material in high concentrations and evidence for settlement is nationally important and makes a highly significant contribution to national understanding of this period.

15. Alderman's Barrow and Madacombe

Reason for designation

The AEAHI includes one of the three long (>200 m) stone rows on Exmoor and substantial burial mounds associated with the stone row. The stone row leads out of Madacombe and towards Alderman's Barrow. The AEAHI boundary has been drawn to include the high potential palaeoecological site in Madacombe (Fyfe, 2005) which is likely to include material contemporaneous with the prehistoric archaeology.

Significance

The significance of the AEAHI is the direct association of the long stone row, the burial monuments and the palaeoecological potential within the area. The archaeology is exceptionally well preserved, in particular the substantial monument at Alderman's Barrow. The area has the potential to contribute to SWARF research aims 1, 49 and 54.

16. Codsend and Dunkery

Reason for designation

This AEAHI is an area of extensive and exceptionally well preserved multi-phase field systems with evidence of enclosed and unenclosed settlement. The prehistoric field systems include areas with different morphologies across Codsend and Hoar Moors (Pattison and Sainsbury, 1989), suggestive of both Bronze Age and Iron Age enclosure. Further, medieval, enclosure cross cuts the prehistoric field banks. The AEAHI includes burial monuments (barrows and cairns) across Rowbarrow and Dunkery Beacon. The moorland was enclosed in the early nineteenth century as part of a scheme to enclosure much of this area. The AEAHI includes palaeoecological sites which are contemporaneous with much of the field archaeology.

Significance

The significance of the AEAHI lies in the complexity of the archaeology and the completeness of elements from different time periods. The multiphase field systems (with at least four phases at Codsend) are unique on Exmoor and within the wider southwest region. The association between the range of site types (field systems of different phases, settlement, funerary monuments and palaeoecological sites) is exceptional on Exmoor. The final process of enclosure in the early nineteenth century adds a further layer of historical significance to the area. Together these elements contribute substantially to the story of farming on Exmoor over the last four thousand years and make a very significant contribution to the character of the Exmoor landscape.

17. Robin and Joaney How

Reason for designation

The AEAHI contains two summit cairns on the eastern end of the Dunkery Ridge (known locally as Robin and Joaney How). Surrounding these are a group of smaller cairns.

Significance

The cairn group around Robin and Joaney How is one of the best examples of a major prehistoric barrow group on Exmoor and is unusual for the number of cairns and barrows in close proximity. The two summit cairns are prestige barrows around which the smaller (possibly later) satellite barrows cluster. The area has the potential to contribute to SWARF research aims 49 and 54.

18. Sweetworthy

Reason for designation

The AEAHI includes a number of late prehistoric enclosures and evidence of medieval settlement and enclosure. At Sweetworthy three hillslope enclosures are clustered together, adjacent to a (later) deserted medieval settlement. At Bagley at the western extent of the area a further hillslope enclosure is adjacent to the site of a Domesday Manor, the remains of which may be the ruined farmstead still preserved within the area.

Significance

The archaeological remains at Sweetworthy and Bagley are unusually rich and concentrated. It is the only area on Exmoor within which continuity of settlement from late prehistory through to the medieval period can be demonstrated. The hillslope enclosure at Sweetworthy is one of Exmoor's most impressive and the association of three other (possibly contemporary) enclosures is exceptional, as is the spatial association with the later, medieval, hamlet and settlement.

19. Mansley Combe

Reason for designation

The AEAHI includes one of the five deserted medieval settlements on Exmoor, which comprises the earthworks of six buildings and the associated field system enclosing the moorland between Bin Combe to the northeast and the river Avill to the south. The outer enclosure overlies well preserved prehistoric field banks.

Significance

The deserted medieval settlement is one of a handful on Exmoor and thus significant. It survives in its complete form within a well-defined area. Further, the complexity of field systems, with the medieval pattern overlying well preserved prehistoric field banks, is rare on Exmoor. These features together provide the potential to address some of the key SWARF research aims, including 30, 40 and 42.

20. Bury Castle

Reason for designation

The AEAHI encloses the hillslope enclosure of Bury Castle, Selworthy, a hillslope enclosures on Exmoor with multiple outworks (outer ditched) enclosing two additional areas. The site occupies a prominent spur end.

Significance

Although just under 50 hillslope enclosures have been identified on Exmoor, Bury Castle is one of only two that have multiple outworks that further enclose land along the spur. It is therefore an extremely unusual monument type on Exmoor. It is also well preserved and thus offers the opportunity to increase the understanding of settlement chronologies through later prehistory (SWARF research aim 40).

21. Cow Castle

Reason for designation

The AEAHI encloses Cow Castle, an extremely well preserved Iron Age hillfort crowning an isolated, rocky knoll within the Barle valley. It contains three or four slight platforms that are most likely the location of round houses.

Significance

The enclosure at Cow Castle is one of only seven hillforts on Exmoor and the only one with earthwork evidence for settlement sites in the interior. It is extremely well preserved and remains of revetment walling can be seen in the southeast rampart. The majority of the other hillforts have been subject to more recent agriculture, slighting any possible remains within them. The AEAHI thus has the potential to provide unique insights into the function, settlement and chronology of hillforts on Exmoor and within the wider region.

22. Bat's Castle and Gallox Hill

Reason for designation

This AEAHI contains well preserved examples of the later prehistoric enclosures, settlement and field systems which are widespread across the hills to the south of the River Avill. The AEAHI encloses the best examples of this late prehistoric landscape. Bat's Castle is one of the seven hillforts on Exmoor, and to the north east lies a well preserved hillslope enclosure at Gallox Hill. Extensive, well preserved later prehistoric field systems and settlement enclosures are found across Withycombe Hill. The location of these earthworks is critical and reflects the increasing need to control access to the sea at a time when trading networks with Iberia and Brittany were becoming established.

Significance

This area is highly significant in the prehistoric archaeology of Exmoor and the wider region owing to the concentration of monuments dating to later prehistory. The association of high status enclosure with broadly contemporaneous field systems and settlement is unparalleled on Exmoor. As such, the area makes a unique contribution to the understanding of social and economic life in later prehistory on Exmoor and within the Southwest.

23. Brendon Common

Reason for designation

Brendon Common is one of several locations that preserve the remains of World War II firing ranges and training grounds. The visible remains are a complex of concrete posts surrounding a brick structure (destroyed after the war by the military) whose function is uncertain, but likely to relate to the trialling of the rocket launcher that took the life of Colonel Maclaren (to whom a memorial on Brendon Common has been erected).

Significance

The physical remains of World War II training are scarce on Exmoor, although the results of their activities, visible as bomb craters, are more common. The archaeology of military use of the uplands is central to a number of the SWARF research aims, in particular 3(n) and 64(b).

24. Burcombe mining complex

Reason for designation

The AEAHI delineates a complex of nineteenth century iron mining sites, including shafts, spoil heaps, prospection pits, roads, the remains of several buildings, and a wheel pit. The open working at Roman Lode consists of the largest mining trench on Exmoor (nearly 700 m long). Excavation of part of the Roman Lode complex suggests that it is an area that has been exploited since at least the early Bronze Age (Juleff and Bray, 2007).

Significance

The remains of nineteenth and twentieth century mineral exploitation of the uplands are significant for a number of reasons. The completeness of the remains at, for example, Blue Gate, within this AEAHI, provide insights into industrial practice. Blue Gate represents the remains of the ambitions of the Knight family to exploit the mineral resources between 1854 and 1856. The scale of extraction at Roman Lode is unique on Exmoor and the limited, but tantalising, evidence of early prehistoric exploitation of the mineral resources is nationally important.

25. Larkbarrow and Tom's Hill

Reason for designation

The AEAHI contains a range of sites from a range of archaeological periods. The principal feature of the designation is the remains of the two nineteenth century farms created by

the Knight family and their associated fields, gutter systems and earthworks of extensive peat cutting. Recent survey (Jamieson, 2001) has also stressed the importance of the area in prehistory. The prehistoric remains within the AEAHI include a stone setting, and two standing stones, and recent (2008) excavations have recovered a substantial amount of Mesolithic flint adjacent to the Larkbarrow farmstead. The remains of the nineteenth century farms were also used for artillery practice during World War II. This indicates a location that has been important in both prehistory and the recent, historic, period. In addition, significant high potential palaeoecological sites (Swap Hill, Beckham and Larkbarrow valley mire) lie within the area of reclamation. These are areas of deep peat which are the current focus of research at the University of Plymouth by Heather Adams.

Significance

The Larkbarrow and Tom's Hill area provides an excellent example of the changing use of the moorland through the complexity of archaeology of different periods. The detailed recording of the remains of nineteenth century reclamation (Jamieson, 2001) provide excellent insights into the processes and activities of this critical period in the development of Exmoor. The form and visual character of the enclosure is critical to the modern landscape character of the moorland. The density of late Mesolithic flint work, adjacent to a high potential palaeoecological site, is unparalleled on Exmoor.

26. Warren Farm

Reason for designation

This AEAHI encloses a very well preserved and substantial rabbit warren. The site comprises eight rectangular mounds with flat tops and flanking ditches (pillow mounds) which are artificial homes for rabbits. The site is thought to predate the mid-nineteenth century farmstead immediately to the north of the site and relate to the earlier establishment of the estate at Simonsbath in the seventeenth century to provide food (and an income).

Significance

The rabbit warren at Warren Farm is unique on Exmoor, and contributes to the understanding of the development of the economy and settlement of the Royal Forest in the seventeenth century.

27. Ley Hill

Reason for designation

The AEAHI encloses the deserted medieval settlement of Ley Hill. Seven simple buildings form a small hamlet which is most likely to date to around the 13th or 14th centuries, abandoned by the 16th century (Richardson, 1999). The field system around the settlement is well preserved and includes both a well developed system of strip lynchets in two distinct bundles of fields, and large enclosures of moorland which form the outfield system. There is also a late prehistoric hillslope enclosure within the AEAHI.

Significance

The Ley Hill medieval settlement is one of only five major sites of this kind on Exmoor, and is thus an unusual site. It is of particular value within this small group as it very well preserved: the organisation of some of the earthwork elements of the settlement provide the strongest evidence of the structure of medieval farming on Exmoor. The relict field system is well preserved and is one of only two sites on Exmoor which retain the infieldoutfield pattern as extensive earthworks. It thus represents an exceptionally complete site with unusually good preservation, and is instrumental in understanding the medieval farming economy.

28. Pickedstones medieval field system

Reason for designation

The AEAHI contains a relict medieval field system and drove way leading to the former Royal Forest. A palaeoecological site lies within the designated area that has been demonstrated to contain material contemporaneous to the use of the field system.

Significance

It is impossible to reconstruct the medieval farming landscape of the whole of Exmoor owing to later enclosure. The field system to the east of Pickedstones Farm represents a very well preserved example of the relict medieval field pattern within an area of later enclosure. Its significance lies in both the completeness of the medieval field pattern, the state of preservation of the extensive earthworks and its relationship to the former Royal Forest. Areas such as this have the potential to contribute significantly to the SWARF research aims 21 and 42.

29. Molland Common

Reason for designation

The AEAHI contains part of an extensive system of relict medieval field systems which extend on open moorland to the east and to the west along the East Anstey Ridge and up Dane's Brook. There is a clear spatial relationship between these field systems and the extant and relict farmsteads that lie off the moorland at the top of Dane's Brook forming a discrete hamlet (the extant farms are Lyshwell, Cloggs and Shircombe). The area contains three outstanding palaeoecological sites which record the changing nature of the farming economy through the historic period (Fyfe *et al.*, 2003b; Rippon *et al.*, 2006).

Significance

This subset of the extensive relict field systems along the East Anstey and Moorhouse Ridges is outstanding for the association of well preserved field systems visible as earthworks, the proximity of the Dane's Brook hamlet (which lies outside the AEAHI) and the palaeoecological sites that lie within the system. It is largely complete with little damage and has made a particularly valuable contribution to the understanding of the medieval farming economy and the development of agriculture on Exmoor and within the wider region.

30. Winsford Hill

Reason for designation

The AEAHI contains an extensive relict medieval field system with clear evidence of ridge and furrow throughout the entire area. The area also contains a line of Bronze Age barrows, although these are not the reason for designation of the area.

Significance

It is impossible to reconstruct the medieval farming landscape of the whole of Exmoor owing to later enclosure. The field systems across Winsford Hill represent a very well preserved example of the relict medieval field pattern and preserve extensive field evidence of ploughing. Its significance lies in both the completeness of the medieval field pattern and the state of preservation of the extensive earthworks and as such has the potential to contribute significantly to the SWARF research aims 42.

31. Wheal Eliza

Reason for designation

The AEAHI contains the remains of the unsuccessful attempts of John Knight in the mid nineteenth century to develop copper mining within Exmoor, and the remains of subsequent iron exploitation. The remains comprise buildings, spoil heaps, the site of a wheel pit, a tail race and the leat that fed the complex from the river.

Significance

Wheal Eliza is a site which makes a special contribution to understanding and recounting the mining history, and history of reclamation of the Exmoor Royal Forest by the Knight family, of the mid nineteenth century on Exmoor. The remains of the iron and copper mine are well preserved and a visible reminder of this part of Exmoor's recent history. Improving the understanding of mineral exploitation and acquisition is central to SWARF research aims 3(n), 38 and 45.

32. North Hill

Reason for designation

The AEAHI contains the remains of two deserted medieval settlements and their associated field systems. The pattern of fields is very different from that of other deserted medieval settlements (e.g. Badgworthy, Ley Hill), and it has thus been interpreted as a settlement that may have been abandoned at a later date. The two settlements comprise seven buildings arranged around two yards. The AEAHI includes the ruins of the medieval chapel at Burgundy Chapel, which was created by the Luttrell family.

Significance

The deserted medieval settlements are one of only five such sites on Exmoor, and the form of the associated field system is unique. It well preserved and largely complete and thus plays an important role in describing the development of medieval and later farming on Exmoor. Burgundy Chapel is unique on Exmoor.

33. Selworthy WWII complex

Reason for designation

This extensive AEAHI contains the remains of a World War II tank training range and associated buildings. The remains comprise three triangular tank circuits and their associated targets (at East Myne, Selworhy Beacon and Bossington Hill) and the

accommodation complex and the Cold War radar installation at Moor Wood. The area also includes a portion of prehistoric field system to the north of Bossington Hill, although this is not the reason that the area has been designated.

Significance

The remains of World War II training areas are of regional importance, reflected in their explicit inclusion in the SWARF research aims (3(n), 64). The Selworthy complex is a particularly good example. It is largely complete and the earthworks survive in good condition.

34. Holdstone Down

Reason for designation

This area is a complex of prehistoric settlement and post-medieval enclosure. The prehistoric monuments comprise four hut circles overlooking the coastal cliffs, and there are prehistoric field banks and clearance cairns associated with one of the hut circles. In 1870 Holdstone Down was sold off for the development of a planned holiday estate (comprising 143 plots). The holiday village was never completed.

Significance

The prehistoric archaeology on Holdstone Down is unusual for the concentration of hut circles in close proximity. Only 45 hut circles or house platforms are known on Exmoor, meaning that just under 10% are contained within this area. The post-medieval interest on Holdstone Down adds significantly to the value of the landscape, recording a unique piece of history in the landscape as the commoners subverted the enclosure system by selling off common land for development.

35. Brockwell Pits

Reason for designation

The area comprises the remains of an extensive iron mine on the lower slopes of Dunkery Hill around 1 km south-west of Wootton Courtenay. The site covers around 7 ha and consists of a series of workings ranging from circular pits to linear trenches with associated spoil dumps that exploited a haematite deposit. Documentary records confirm working in the 19th century, but earlier activity is possible. The mine was worked out by the late 19th century and abandoned.

Significance

Both Brockwell Pits and Kitnor Heath make a special contribution to understanding and recounting the history of mining on Exmoor, in particular the role that extractive industry in the 19th century played in defining the character of the landscape of the upland. Improving the understanding of post-medieval mineral exploitation and acquisition is central to SWARF research aims 38, 47 and 47.

36. Kitnor Heath

Reason for designation

The area encloses a discontinuous series of mining openworks, consisting of a series of pits and trenches, stretching across 450 m of Kitnor Heath northeast of Exford. They trend eastwest and it is most likely that they are the remains of iron extraction. The workings are undated, but the regular morphology of the trenches suggests a 19th century component although it is possible that this phase represents re-examination of earlier workings extant at that time.

Significance

Both Brockwell Pits and Kitnor Heath make a special contribution to understanding and recounting the history of mining on Exmoor, in particular the role that extractive industry in the 19th century played in defining the character of the landscape of the upland. Improving the understanding of post-medieval mineral exploitation and acquisition is central to SWARF research aims 38, 47 and 47.

37. Little Hangman

Reason for designation

The AEAHI encloses the earthworks of a suspected early prehistoric (perhaps Neolithic) enclosure situated precipitously on top of the cliffs to the northeast of Combe Martin. No field survey has as yet been undertaken at the site which was discovered by the National Mapping Programme project 2008.

Significance

The significance of this site is yet to be proven; however, there is the possibility that it is a Neolithic enclosure, a type of site that is poorly understood within the Southwest. Should it be demonstrated to be Neolithic it may reveal aspects of the functioning of upland areas through a critical period of prehistory through the transition to farming.

Condition criteria and monitoring template for AEAHIs

The mechanism for assessing the condition of each AEAHI has been driven by an assessment of the threats to the survival of the archaeological, palaeoecological and historic potential of the moorland. These threats have been identified through a desktop exercise supported by meetings with appropriate English Heritage and Exmoor National Park Authority staff. Methodologies for monitoring landscape condition within other protected landscape schemes have been reviewed through consultation within and without the region (meetings, telephone and e-mail correspondence).

Threats to the archaeology of moorland

Threats to the preservation of archaeological sites on moorland can broadly be grouped into five main types: farming; visitor pressure; vandalism; vegetation; and maintenance of water quality. More complete descriptions of these threats are presented in Table 2, following review of existing studies (Fyfe, 2000, 2006; OAN, in prep.). The consequences of these threats can be grouped into three main categories: direct damage to elements of the archaeology (e.g. vandalism, erosion); damage to the matrix within which archaeology and palaeoecology is contained (e.g. bracken encroachment, wetland drainage); actual damage and/or visual degradation of the landscape context of the AEAHIs (e.g. visual damage through footfall erosion, changes in aesthetic value through scrub development). These threats form the basis for monitoring of condition of elements of the AEAHI.

Review of practice elsewhere

The concept of designating landscape areas for their archaeological value is restricted to the southwest at present. Dartmoor National Park Authority established 14 Premier Archaeological Landscapes (PALs) in 2005 as part of a Moorland Vision project. The function of the PALs is to delineate areas within which archaeological conservation takes precedence over conservation ecology or other interest groups. Cornwall County Council is in the process of adopting a similar scheme for Bodmin, based on the criteria established on Exmoor in 2004. At present neither of these schemes have rigorous methodologies in place for monitoring the condition of the designated areas, although development of these is in progress.

Group	Threat	Details/considerations
Farming	Erosion caused by livestock	Care needed in selection of sites for supplementary feeders to avoid poaching of sites/damage to standing archaeology or waterlogged sites which are greatly sensitive to poaching.
	Vehicle damage	Inadvertent damage caused by vehicles (including quad bikes), and damage caused by flailing, mowing and bracken cutting. Greater awareness of locations of sensitive archaeological sites needed.
	Ploughing and	Most likely as a result of ecological restoration (particularly heather). Advice from the appropriate ENPA archaeological officer should be given prior to any
	ground preparation	ground disturbance.
	Swaling	Firebreaks should be installed around sensitive archaeological sites (standing stones, mires) and vehicle movement should be controlled (see above)
	Drainage works	Results in degradation of organic archaeological remains, the peat matrix and palaeoenvironmental resources. Also exacerbates erosion through focusing of flow.
Visitor pressure	Footfall damage	Increased visitor pressure results in footpath widening and erosion. Around 'honeypot' sites establishment of robust paths may reduce expanse of damage. Intensive visiting of individual sites may lead to localised erosion and damage.
	Mountain biking	Most likely to result in erosion to sensitive sites; protection of sensitive sites by re-routing established trails will reduce the issue.
	Trail biking	Most likely to result in erosion to sensitive sites; protection of sensitive sites by re-routing established trails will reduce the issue.
	Pony	Most likely to result in erosion to sensitive sites; protection of sensitive sites by
	trekking/hunting	re-routing established trails will reduce the issue. Hunts should be made aware of locations of sensitive areas and encouraged to avoid these.
	Offroad vehicles	Inadvertent damage caused by vehicles (including quad bikes), including as part of hunt support. Greater control of off-road vehicles which are not part of the farming economy should be established.
Vandalism		Deliberate destruction and removal of elements of the historic environment should be discouraged.
Vegetation	Bracken expansion	Rhizomes are destructive to archaeological remains and sealed contexts, and bracken should be controlled in the most sensitive areas (predominantly settlement sites).
	Scrub	Increased scrub development (including re-wilding schemes) may (1) cause
	development	damage to archaeological remains; (2) makes the historic environment less accessible; (3) diminish the possibilities of further discoveries and advances; (4) lead to the focusing of farming and other pressures in smaller areas resulting in increased pressure on non-scrub locations. Scrub control in sensitive areas is desirable.
Water	Abstraction from	Tapping headwater mires (using leats) alters the hydrological balance of wetland
quality	wetlands	systems and can cause water table drawdown and consequent oxidation of upper levels of peat systems.
	Drainage	Any action that lowers water table levels in peat areas will degrade the palaeoenvironmental value of mires and the potential survival of waterlogged archaeology. Restoration works should be undertaken, but in a way sensitive to the potential archaeological and palaeoecological resource.
	Pollution	Enhanced nutrient levels in base-poor peat systems will lead to degradation of the palaeoenvironmental and archaeological potential of the peat matrix.

Table 2: Detail of threats to the historic environment on moorlands (adapted from Fyfe,2000; Wilson-North and Riley, 2004; Fyfe, 2006; OAN, in prep.)

At present DNPA uses a threat-based approach to monitoring PALs. The condition of a PAL is based on (1) the MARS results for the scheduled monuments within it; and (2) assessment of whether the vegetation cover is favourable to the archaeology (against established criteria for each PAL). Discussion of the vegetation cover is made with the Commoners and Natural England, resulting in agreed management objectives enforced through ESA agreements.

Responsibility for establishing the condition of the proto-PALs on Bodmin is being taken by the Cornwall Archaeological Society (led by Tony Blackman) in liaison with EH and CCC. This process is ongoing.

Condition criteria and monitoring template

The methodology that has been produced here for the assessment of condition of areas has been developed for repeat survey by volunteers rather than for skilled archaeologists or consultants. It has therefore been made as objective as possible, removing the necessity for subjective, value-based judgments by individuals. Monitoring focuses on the *significant* archaeological elements within each area, which are assessed and recorded individually and given a condition score. The score for each element is derived through the use of decision support tools in the form of objective keys. The overall condition of an AEAHI is determined by the average score for all elements, which are also recorded as a profile for each area.

The advantage of assessing each significant element individually is that it provides a richer dataset for the effective management of the archaeology within the moorland AEAHIs. In addition to establishing which areas are in favourable or unfavourable condition, the assessment of classes of site will allow detailed information of risk or vulnerability of individual components through time. Further, although an average score for an AEAHI may suggest it is in favourable condition, individual elements of the historic environment within the AEAHI may be in poor or declining condition and require active management.

The decision support tools for assessing the condition of the individual significant elements of the archaeology in each area have grouped the archaeology into six main classes: (i) stone settings; (ii) discrete earthworks [including unroofed buildings, hillforts, hillslope enclosures, deserted settlements, barrows, mineworks and linear monuments]; (iii) extensive earthworks [including medieval and prehistoric field systems, parliamentary enclosure and extensive mineworks]; (iv) structureless sites [cropmarks and lithic scatters]; (v) roofed buildings; and (vi) palaeoecological sites. They are in the form of simple keys which ask yes/no questions as to whether sites show evidence of damage (Appendix 5) and return a condition score on a scale of 1 to 5 (Condition 1 = good condition, no current management issues; Condition 2 = good condition, minor management issues but no action required;

Condition 3 = fair condition, site may require management intervention; Condition 4 = poor condition, site requires active management; Condition 5 = poor condition with integrity of earthworks under threat, management action required). Steps in the key are numbered and volunteers are required to record the questions answered. This allows desk-based assessment of the decisions that resulted in the condition score.

In addition to following the condition criteria keys, the survey also requires volunteers to assess any visual damage to the site in seven categories (burrowing animals, livestock, vegetation, vehicle damage, recreation, natural erosion, agriculture) in one of four classes: not seen, limited, present or extensive. This provides an additional check for the relative impact of different threats to the site. A photographic record is also made of each element, in particular drawing attention to any threats or damage to a site that are observed during the survey. The wider landscape element of each area is to be monitored through fixed-point photography (8 photographs in the main compass directions).

In practice volunteers should be provided with:

(i) Monitoring forms (2) for each AEAHI. Form 1 is an AEAHI-specific sheet detailing the boundary of the AEAHI (in map form), the area description and the specific elements that should be monitored. It also includes tables for general fixed point photograph records for the AEAHI and a summary table in which the condition of the elements is logged. Form 2 is a generic data sheet for recording condition of individual elements within the AEAHIs.

- (ii) Digital camera
- (iii) Compass
- (iv) Hand held GPS

When assessing the condition of each AEAHI volunteers should follow a clear work pattern. They should familiarise themselves with the elements to be monitored (from form 1), and then systematically examine each in turn. For each element they should complete the *Visual evidence of damage* table, and then work through the appropriate condition score key, noting on the form the sequence of questions followed. They should then make a photographic record of any damage or threat to the site, noting the photograph number, the orientation (compass direction) of the camera and the reason for the photograph. Once this is complete they should examine the next significant element within the area.

Recommendations for further work

1. More extensive field-based survey is required to complete the palaeoecological potential phase of this work. This should be undertaken through walkover survey of moorland areas which are not at present covered. It is recommended that methodologies for this survey follow those adopted by Adams (ongoing) and include extensive measurements of peat depth and condition.

2. Mapping and detailed desktop (and where appropriate, field) survey of each AEAHI is required to detail all the known archaeology within each area and highlight the significant elements of this. This has not been undertaken within this study owing to the ongoing National Mapping Programme survey and the ongoing updating of the ENPA HER which is in effect undertaking part of this process. These maps and surveys should be considered an essential part of the monitoring process.

3. The designation of AEAHIs should be periodically reviewed to reflect advances in understanding through future survey and excavation within Exmoor National Park.

4. The areas recommended within this report receive no statutory protection. It is desirable that a local designation is created which at least seeks to protect the more important areas from those outlined here. This could result in a list that is adopted by the National Park Authority: these areas would receive management priority over other conservation interests. It is recommended that AEAHIS form part of the Local List.

5. The process of designating Areas of Exceptional Archaeological and Historical Importance has been limited to moorland. A number of important sites lie within enclosed land on Exmoor. A review should be undertaken to extend this scheme beyond the moorland line.

6. This review has identified regionally and nationally important landscapes and efforts should be made to encourage research in these areas to promote the understanding of Exmoor's prehistory and history.

Acknowledgements

The authors are grateful for the contributions of Rob Wilson-North (ENPA), Hazel Riley (English Heritage), Vanessa Straker (English Heritage) and Lee Bray (ENPA) towards the production of this report during project meetings. Discussions with Ann Reynolds (Cornwall County Council), Andy Crabb (DNPA), Jane Marchand (DNPA), Tony Blackman (Cornwall Archaeological Society) and John Roberts (Snowdonia NP) provided insights into monitoring practice elsewhere. Any mistakes, errors or misrepresentations within this report remain the responsibility of the authors. Maps are based on the Ordnance Survey maps supplied to ENPA Licence Number LA 08906L.

Appendix 1: Gazetteer of palaeoecological sites

	site	NGR	NGR	proxy	dated	reference
		easting	northing			
1	Halscombe Allotment	281900	133470	pollen	yes	Carter (2002)
2	Hoccombe Combe	277300	144400	pollen	no	Wessely (2002)
3	Landacre Bridge	281650	136170	pollen	no	Badger (2000)
4	Black Hill (Squallacombe)	274500	139000	pollen	no	Albutt (2000)
5	Moles Chamber	271850	139370	pollen,	yes	Fyfe (2000)
_				testate amoebae		- 6
6	Brightworthy Farm 1	283330	135960	pollen	yes	Fyfe et al (2003a)
7	Exebridge spring mire	293600	125270	pollen	yes	Fyfe et al (2003a)
8	Gourte Mires	282470	129690	pollen	yes	Fyfe et al (2003b)
9	Anstey's Combe	282740	129680	pollen	yes	Fyfe et al (2003b)
10	Long Breach (Molland)	282070	130660	pollen	yes	Fyfe et al (2003b)
11	Pinkery Canal	272420	141460	pollen	no	Crabtree (1995)
12	Porlock Marsh (PM4)	287790	147675	pollen, diatoms	yes	Jennings et al (1998)
13	Porlock Forest Bed (FB7)	287123	147870	pollen, diatoms	yes	Jennings et al (1998)
14	Porlock Forest Bed (FB4)	287165	147832	pollen, diatoms	yes	Jennings et al (1998)
15	Porlock Forest Bed (FB2)	287100	147785	pollen, diatoms	yes	Jennings et al (1998)
16	Hoar Moor	286260	140740	pollen	yes	Francis & Slater (1990)
17	Codsend Moor	287010	141060	pollen	yes	Francis & Slater (1992)
18	The Chains	273450	141950	pollen	no	Straker & Crabtree (1995)
19	The Chains	273455	142000	pollen	yes	Merryfield & Moore (1974
20	Hoar Tor	276330	142970	pollen	no	Merryfield (1977)
21	Alderman's Barrow	283680	142300	pollen	no	Merryfield (1977)
22	Brendon Common	277000	145030	pollen	no	Merryfield (1977)
23	Brightworthy Farm 2	283100	135930	pollen	no	Fyfe (2000)
24	Halscombe Allotment	282000	133700	pollen	yes	Jennings (1997)
25	Hawkcombe Head	286900	145400	pollen	no	Jackson (1997)
26	Hawkcombe Head	286900	145400	pollen	no	Slade (1997)
27	Higher Holworthy	268840	144040	pollen	yes	Rippon et al (2006)
28	Twineford Combe Head	267570	142860	pollen	yes	Rippon et al (2006)
29	Lanacombe	276600	142500	pollen, macrofossils	yes	Chambers et al (1999)
30	Larkbarrow	282500	141800	pollen, macrofossils	yes	Chambers et al (1999)
31	Roman Lode	275240	138110	pollen, geochemistry	yes	Fyfe (2008)
32	Madacombe	283503	142669	pollen	no	Fyfe (2005)
33	Hoscombe	282854	144018	pollen	no	Fyfe (2005)
34	Larkbarrow	282955	142621	pollen	no	Fyfe (2005)
35	Swap Hill	281312	141968	pollen	no	Fyfe (2005)
36	Comerslade	273797	137201	pollen,macrofossils, testate amoebae	yes	Fyfe et al (2008)
37	Long Holcombe	276944	135651	pollen, macrofossils, testate amoebae	yes	Fyfe et al (2008)
38	North Twitchen Springs	272620	137090	pollen, geochemistry	yes	Fyfe (unpublished)

Site (NGR given in Appendix 1)	Depth	Lab code	Date (uncal. BP or % modern)	Calibrated age range
Hoar Moor	11-19	I-15546	240±80	Cal AD 1470-1950
	35-43	I-15547	380±80	Cal AD 1410-1660
	65-75	I-15548	1760±80	Cal AD 80-430
	100-108	I-15549	5410±110	4460-3980 cal BC
Codsend Moor	17-25	I-16104	930±140	Cal AD 780-1380
	55-63	I-16091	1660±130	Cal AD 80-650
	63-71	I-16086	1990±160	390 cal BC – cal AD 400
	81-89	I-16087	2270±150	790 cal BC – cal AD 50
The Chains	58	UB-816	1500±60	Cal AD 420-660
(Merryfield section)	100	UB-817	2215±90	410-5 cal BC
, ,	130	UB-819	2335±260	1000 cal BC – cal AD 230
	200	UB-820	3505±120	2190-1520 cal BC
	240	UB-821	4170±75	2910-2500 cal BC
Exebridge	61-62	CAMS-65905	6760±40	5730-5560 cal BC
	120-121	WK-9601	7540±60	6470-6240 cal BC
	140-141	WK-9602	7710±60	6650-6440 cal BC
	319-320	CAMS-65904	9530±50	9160-8650 cal BC
Brightworthy	77-82	BETA-142642	3700±50	2270-1940 cal BC
Signtworthy	114-115	BETA-142643	550±50	4450-4250 cal BC
	151-152	UtC-9606	8510±60	7600-7390 cal BC
Moles Chamber	160	UtC-9181	680±40	Cal AD 1280-1400
violes chamber	224	UtC-9181	710±110	Cal AD 1280-1400 Cal AD 1040-1430
	267-272	BETA-140872	1050±60	Cal AD 890-1160
	312	UtC-9183	1030±00 1086±40	Cal AD 890-1100
	326-329	BETA-140873		Cal AD 890-1020 Cal AD 80-320
	326-329 346		1820±40	1600-1310 cal BC
		UtC-8620	3170±60	
Halscombe Allotment	84-86	WK-10648	3550±60	2110-1690 cal BC
an a Dua a sh	156-158	WK-10647	7080±60	6060-5805 cal BC
Long Breach	24-29	WK-10624	650±60	Cal AD 1270-1420
	55-60	WK-10623	2380±60	770-370 cal BC
	94-99	WK-10622	3220±60	1630-1320 cal BC
	125-130	WK-10621	4190±60	2900-2580 cal BC
- · · · · ·	149-154	WK-10620	4700±60	3640-3360 cal BC
Gourte Mires	28-33	WK-10619	1020±60	Cal AD 890-1170
	80-85	WK-10618	2230±70	410-90 cal BC
	150-155	WK-10617	3560±60	2120-1730 cal BC
	190-195	WK-10616	3960±60	2630-2280 cal BC
Anstey's Combe	35-40	WK-10613	420±60	Cal AD 1410-1640
	82-87	WK-10612	1160±70	Cal AD 680-1020
	145-150	WK-10610	1920±60	50 cal BC – cal AD 240
North Twitchen Springs	24-26	BETA-202087	1430±40	Cal AD 560-670
	44-46	BETA-202086	2260±40	400-200 cal BC
	64-66	BETA-202085	2950±40	1290-1020 cal BC
	84-86	BETA-202084	3380±40	1750-1540 cal BC
	104-106	BETA-202083	3620±40	2120-1890 cal BC
Higher Holworthy	113-115	WK-12540	755±38	Cal AD 1210-1300
	103-105	WK-12541	786±47	Cal AD 1160-1300
	77-79	WK-12542	282±43	Cal AD 1480-1670
Twineford Combe Head	174-176	WK-12543	441±39	Cal AD 14001520
	107-108	WK-12544	153±46	Modern
	74-75	WK-12545	93±43	Modern
Roman Lode (Burcombe)				

Appendix 2: Radiocarbon dates from Exmoor palaeoecological sequences

			modern	
	10-11	OxA-15825	106.6±0.3%	Modern
			modern	
	52-53	OxA-15827	2184±29	
	52-53	OxA-15865	2127±26	
	52-53	Weighted mean	2153±19	350-115 cal BC
The Chains	48-50	UBA-8578	161±28	Cal AD 1664-1953
(Fyfe section)	90-92	UBA-8577	101±23	cal AD 1688-1954
	110-112	UBA-8576	384±28	Cal AD 1444-1630
	130-132	UBA-8575	1750±26	Cal AD 231-360
	150-152	UBA-8574	2102±34	341-41 cal BC
	170-172	UBA-8573	2748±33	976-818 cal BC
Comerslade	20-21	SRR-16676	1780±30	Cal AD 130-340
	50-51	SRR-16677	3605±30	2040-1880 cal BC
	80-81	SRR-16678	5915±30	4850-4710 cal BC
	106-107	SRR-16679	7145±30	6070-5980 cal BC
	124-125	SRR-16680	7350±30	6350-6080 cal BC
Long Holcombe	36-38	SRR-16681	520±30	Cal AD 1320-1450
	76-78	SRR-16682	1175±30	Cal AD 770-970
	116-118	SRR-16683	4375±30	3090-2900 cal BC

Appendix 3: Relevant Research Aims from "The Archaeology of South West England: South West Archaeological Research Framework, Resource Assessment, and Research Agenda" (Webster 2007)

1. Extend the use of proven methodologies for site location and interpretation, and encourage the development of new techniques

(c) A need for controlled excavation of stratified Palaeolithic/Mesolithic sites.

(d) Prospection for/assessment of peat for early Holocene evidence.

3. Address 'gaps' in our knowledge

(n) Post-medieval/Modern mining heritage, and military survivals

10. Address our lack of understanding of key transition periods

(a) Mesolithic/Neolithic transition

(c) When and under what conditions do fieldsystems and roundhouse traditions begin? Do fieldsystems begin in the early 2nd millennium BC?

16. Increase the use and improve the targeting of scientific dating

(h) The dating, nature and development of prehistoric tin/copper production e.g. using heavy metal profiles in upland peat.

18. Target specific soil and sediment contexts for environmental information

21. Improve our understanding of environmental aspects of farming

25. Improve our understanding of Palaeolithic/Mesolithic landscapes

30. Develop and test methodologies to identify Early Medieval rural settlement

The lack of visibility of smaller rural sites has led to a reliance on more visible elite settlements. Addressed by wider landscape studies and careful targeting of fieldwork.

38. Widen our understanding of mineral acquisition and processing

(a) alluvial and peat sequences to provide chronology,

(b) mine remains-may have well-dated sequences which demonstrate technological change,

(f) little knowledge of early metal extraction/production/distribution.

(h) Exmoor-investigations have show real potential, but more needs to be discovered about the organisation of industries and assoc settlements.

40. Improve our understanding of agricultural intensification and diversification in later prehistory.

There is a need to understand the chronology and regionality of the intensification and diversification of agriculture from the MBA.

42. Improve our understanding of medieval farming

(a) management of grassland/meadows/pasture

45. Broaden our understanding of post-medieval to modern technology and production

(a) 1550-1750 – processing and manufacture of metals (mining/production sites)

47. Assess the archaeological potential for studying medieval economy, trade, technology and production

(b) quarries, and iron/metal production.

49. Improve our knowledge of Neolithic and EBA social life

(a) can 'catchments' of communities involved in building of large communal monuments be determined? (standing stones/barrow cemeteries)

54. Widen our understanding of monumentality of the Neolithic and EBA

(a) some kinds of stone settings (such as Exmoor stone settings) poorly understood

- (b) monuments which don't fit into conventional categories
- (c) Differences of scale/complexity/histories of use within categories of monuments.
- (d) How can the emergence of clusters of monuments be understood?

(f) Are suspected 'tor enclosures' of a similar character to Carn Brea/Helman Tor – are these local or regional centres, or the product of "topographical determinism"?

(g) What evidence is there of Neolithic/ENA enclosures in a region where henges are rare?

- (i) More work is needed on the chronology of linear monuments e.g. rows, bank cairns.
- (j) Approaches to BA round barrows as "communal monuments" have much to offer.

64. Improve our understanding of the less-researched areas of post-medieval to modern defence and warfare

(b) Logistics (depots, dumps, repair and transport facilities), command and control resources, personnel services (training, medical care, recreation, security for service people).

General area fixed -point photography	NGK Direction Pholo N N N
Date: Weather: Recorder's name: Sheet no of	Area map Poundary over 1:2500 05 map) including key features to be monitored
LEAPH UID: LEAPH name:	Area map (boundary over [Map to be annotated ann Area description and signified NGR Elements to be monitored NGR Element

Appendix 4: Condition monitoring forms

Weather:	s name: Sheet no of	AREA sub-no: HER no: NGR:	SMR no:	Visual evidence of damage	Category Not Limited Present Extensive Burrowing animals seen Limited Present Extensive Burrowing animals seen seen seen seen seen Uverstock Vegetation seen seen seen seen seen Vegetation Vegetation secretation secretation	Purpose/key points	AREA sub-no: HER no: NGR: SMR no: SMR no: Visual evidence of damage Category Not Unarowing animals seen Immiled Present Edensive Unarowing animals seen Immiled Present Edensive Vergenation And Immiled Present Edensive Vergenation And Immiled Present Edensive Other (state what) And Immiled Present Edensive Contract state what) And Immiled Present Edensive Admiculture Contract Present Edensive Other (state what) And Immiled Present Edensive Admiculture And Immiled Present Edensive Admiculture Admiculture Ad
): Date:	me: Recorder's name:		question sequence:	Condition score (1-5)	Noles on condition/damage	ord NGR Orientation	: questions sequence: are (1-5) dition/damage
LEAPH UID:	LEAPH name:	: Element type:	Key no:	Conditio	Extensive Notes on	Photo record	
	of	NGR:		amage	Present		
Weather:	Sheet no	HER no:	ö	evidence of d	n n n n n n n n n n n n n n n n n n n	oints	HER no: o: evidence of <u>nogen</u> moge seen sion sion sion sion sion sion sion sio
Date: Weather:	Recorder's name: Sheet no	AREA sub-no: HER no:	question sequence: SMR no:	Visual evidence of damage	Category Not Burrowing animals seen Uversiock Vegetation Vehicle damage Reaction Natural erosion Agriculture Other (state what)	Orientation Purpose/key points	Element type: AREA sub-no: HER no: Key no: SMR no: SMR no: SMR no: SMR no: SMR no: Condition score (1-5) Visual evidence of damage Notes on condition/damage Caregory seen Universe Notes on condition/damage Process Notes on condition and ension Retricted and ension Retricted and ension Retricted

Appendix 5: Condition keys for the assessment of condition of elements within AEAHIs

Key 1: Stone Settings

Condition 1 = good condition, no current management issues Condition 2 = good condition, minor management issues but no action required Condition 3 = fair condition, site may require management intervention Condition 4 = poor condition, site requires active management Condition 5 = poor condition with integrity of setting under threat, management action required

1	Stones in correct position (i.e. evidence for recent toppling)?	Y = Q2
		N = Q34
2	Are there erosion hollows around any stones?	Y = Q3
		N = Q24
3	Is erosion active (bare earth/poaching)?	Y = Q4
		N = Q14
4	Is any of the setting obscured by vegetation (specifically	> 25% covered = Q5
	bracken, gorse or scrub)?	< 25% covered = Q8
		N = Q11
5	Are land management practices (swaling, burning, agricultural	Y = Q6
	vehicle damage) impacting on the setting or its surrounding?	N = Q7
6	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 4
7	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 4
8	Are land management practices (swaling, burning, agricultural	Y = Q9
	vehicle damage) impacting on the setting or its surrounding?	N = Q10
9	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 4
10	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 4
11	Are land management practices (swaling, burning, agricultural	Y = Q12
	vehicle damage) impacting on the setting or its surrounding?	N = Q13
12	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
_	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 4
13	Is there any evidence for recreational damage to the site (e.g.	Y = COND 4
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 3
14	Is any of the setting obscured by vegetation (specifically	> 25% covered = Q15
	bracken, gorse or scrub)?	< 25% covered = Q18
		N = Q21
15	Are land management practices (swaling, burning, agricultural	Y = Q16
	vehicle damage) impacting on the setting or its surrounding?	N = Q17
16	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 4
17	Is there any evidence for recreational damage to the site (e.g.	Y = COND 4
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 3
18	Are land management practices (swaling, burning, agricultural	Y = Q19

	vehicle damage) impacting on the setting or its surrounding?	N = Q20
19	Is there any evidence for recreational damage to the site (e.g.	Y = COND 4
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 3
20	Is there any evidence for recreational damage to the site (e.g.	Y = COND 3
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 2
21	Are land management practices (swaling, burning, agricultural	Y = Q22
	vehicle damage) impacting on the setting or its surrounding?	N = Q23
22	Is there any evidence for recreational damage to the site (e.g.	Y = COND 4
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 3
23	Is there any evidence for recreational damage to the site (e.g.	Y = COND 3
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 1
24	Is any of the setting obscured by vegetation (specifically	> 25% covered = Q25
	bracken, gorse or scrub)?	< 25% covered = Q28
		N = Q31
25	Are land management practices (swaling, burning, agricultural	Y = Q26
23	vehicle damage) impacting on the setting or its surrounding?	N = Q27
26	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
20	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 4
27	Is there any evidence for recreational damage to the site (e.g.	Y = COND 4
27	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 3
28	Are land management practices (swaling, burning, agricultural	Y = Q29
20		N = Q30
20	vehicle damage) impacting on the setting or its surrounding?	
29	Is there any evidence for recreational damage to the site (e.g.	Y = COND 4
20	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 3
30	Is there any evidence for recreational damage to the site (e.g.	Y = COND 3
24	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 2
31	Are land management practices (swaling, burning, agricultural	Y = Q32
22	vehicle damage) impacting on the setting or its surrounding?	N = Q33
32	Is there any evidence for recreational damage to the site (e.g.	Y = COND 3
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 2
33	Is there any evidence for recreational damage to the site (e.g.	Y = COND 3
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 1
34	Are there any active erosion hollows around the remaining in	Y = Q35
	situ stones?	N = Q45
35	Is any of the setting obscured by vegetation (specifically	> 25% covered = Q36
	bracken, gorse or scrub)?	< 25% covered = Q39
		N = Q42
36	Are land management practices (swaling, burning, agricultural	Y = Q37
	vehicle damage) impacting on the setting or its surrounding?	N = Q38
37	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 5
38	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 5
39	Are land management practices (swaling, burning, agricultural	Y = Q40
	vehicle damage) impacting on the setting or its surrounding?	N = Q41
40	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 5
41	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
41	Is there any evidence for recreational damage to the site (e.g.	
41		Y = COND 5

43	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 4
44	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 4
45	Is any of the setting obscured by vegetation (specifically	> 25% covered = Q46
	bracken, gorse or scrub)?	< 25% covered = Q49
		N = Q52
46	Are land management practices (swaling, burning, agricultural	Y = Q47
	vehicle damage) impacting on the setting or its surrounding?	N = Q48
47	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 4
48	Is there any evidence for recreational damage to the site (e.g.	Y = COND 4
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 3
49	Are land management practices (swaling, burning, agricultural	Y = Q50
	vehicle damage) impacting on the setting or its surrounding?	N = Q51
50	Is there any evidence for recreational damage to the site (e.g.	Y = COND 5
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 4
51	Is there any evidence for recreational damage to the site (e.g.	Y = COND 4
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 3
52	Are land management practices (swaling, burning, agricultural	Y = Q53
	vehicle damage) impacting on the setting or its surrounding?	N = Q54
53	Is there any evidence for recreational damage to the site (e.g.	Y = COND 4
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 3
54	Is there any evidence for recreational damage to the site (e.g.	Y = COND 3
	footpath erosion, bike or vehicle tracks, fires or vandalism)?	N = COND 2

Key 2: discrete earthworks (including unroofed buildings, hillforts, hillslope enclosures, deserted settlements, barrows, mineworkings, linear monuments)

Condition 1 = good condition, no current management issues

Condition 2 = good condition, minor management issues but no action required

Condition 3 = fair condition, site may require management intervention

Condition 4 = poor condition, site requires active management

Condition 5 = poor condition with integrity of earthwork under threat, management action required

1	Is any part of the earthwork obscured or overgrown by	> 25% = Q2
	damaging vegetation (bracken, gorse, other scrub or trees)?	<25% = Q33
		N = Q64
2	Is there any disturbance or damage to the earthwork as a result	Y = Q3
	of recreation (footpaths, bike or pony trails, fires or vandalism)?	N = Q18
3	Is there any livestock damage (trampling/poaching, feeder	Y = Q4
	location problems)?	N = Q11
4	Are there any active or inactive animal burrows?	Y = Q5
		N = Q8
5	Is there any agricultural vehicle impact on or around the	Y = Q6
	earthwork (tracks, damage)?	N = Q7
6	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 5
7	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
8	Is there any agricultural vehicle impact on or around the	Y = Q9
	earthwork (tracks, damage)?	N = Q10
9	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 5
10	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
11	Are there any active or inactive animal burrows?	Y = Q12
		N = Q15
12	Is there any agricultural vehicle impact on or around the	Y = Q13
	earthwork (tracks, damage)?	N = Q14
13	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 5
14	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
15	Is there any agricultural vehicle impact on or around the	Y = Q16
	earthwork (tracks, damage)?	N = Q17
16	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 5
17	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
18	Is there any livestock damage (trampling/poaching, feeder	Y = Q19
	location problems)?	N = Q26
19	Are there any active or inactive animal burrows?	Y = Q20
	,	N = Q23
20	Is there any agricultural vehicle impact on or around the	Y = Q21

21	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
22	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
23	Is there any agricultural vehicle impact on or around the	Y = Q24
	earthwork (tracks, damage)?	N = Q25
24	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 5
25	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
26	Are there any active or inactive animal burrows?	Y = Q27
		N = Q30
27	Is there any agricultural vehicle impact on or around the	Y = Q28
	earthwork (tracks, damage)?	N = Q29
28	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
29	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
30	Is there any agricultural vehicle impact on or around the	Y = Q31
	earthwork (tracks, damage)?	N = Q32
31	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 4
32	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 3
33	Is there any disturbance or damage to the earthwork as a result	Y = Q34
	of recreation (footpaths, bike or pony trails, fires or vandalism)?	N = Q49
34	Is there any livestock damage (trampling/poaching, feeder	Y = Q35
	location problems)?	N = Q42
35	Are there any active or inactive animal burrows?	Y = Q36
		N = Q39
36	Is there any agricultural vehicle impact on or around the	Y = Q37
	earthwork (tracks, damage)?	N = Q38
37	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 5
38	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 5
39	Is there any agricultural vehicle impact on or around the	Y = Q40
	earthwork (tracks, damage)?	N = Q41
40	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
-		N = COND 5
41	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
• •		N = COND 4
42	Are there any active or inactive animal burrows?	Y = Q43
	The first of a derive of mactive diffinit burlows?	N = Q46
43	Is there any agricultural vehicle impact on or around the	Y = Q44
чJ	earthwork (tracks, damage)?	N = Q45
44	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
44	וא נווכרב מווץ עמווומבב ורטוון וומנערמו ברטאטוו (שמנפר, שווע, טנוופר):	N = COND 5
15	Is there any damage from natural program (water wind other)?	
45	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4 N = COND 4
10	is there any agricultural vahiols impact or an argued the	
46	Is there any agricultural vehicle impact on or around the	Y = Q47

	earthwork (tracks, damage)?	N = Q48
47	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 4
48	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 3
49	Is there any livestock damage (trampling/poaching, feeder	Y = Q50
	location problems)?	N = Q57
50	Are there any active or inactive animal burrows?	Y = Q51
		N = Q54
51	Is there any agricultural vehicle impact on or around the	Y = Q52
	earthwork (tracks, damage)?	N = Q53
52	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
52	is there any damage normataral crosion (water, wha, other).	N = COND 5
53	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
55	is there any damage normatural erosion (water, whild, other):	N = COND 4
	is there any agricultural vahiols impact on or around the	
54	Is there any agricultural vehicle impact on or around the	Y = Q55
CC	earthwork (tracks, damage)?	N = Q56
55	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
50	lethous one domage from actional survival states (states to the total state)?	N = COND 5
56	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
57	Are there any active or inactive animal burrows?	Y = Q58
		N = Q61
58	Is there any agricultural vehicle impact on or around the	Y = Q59
	earthwork (tracks, damage)?	N = Q60
59	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
60	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 3
61	Is there any agricultural vehicle impact on or around the	Y = Q62
	earthwork (tracks, damage)?	N = Q63
62	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 3
63	Is there any damage from natural erosion (water, wind, other)?	Y = COND 3
		N = COND 2
64	Is there any disturbance or damage to the earthwork as a result	Y = Q65
	of recreation (footpaths, bike or pony trails, fires or vandalism)?	N = Q80
65	Is there any livestock damage (trampling/poaching, feeder	Y = Q66
	location problems)?	N = Q73
66	Are there any active or inactive animal burrows?	Y = Q67
		N = Q70
67	Is there any agricultural vehicle impact on or around the	Y = Q68
57	earthwork (tracks, damage)?	N = Q69
68	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
00	וא נווכרב מווץ למווומבר ויסוון וומנטומו ברסאטון (שמנפר, שווט, טנוופר):	N = COND 5
60	Is there any damage from natural proving (water wind other)?	
69	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
70		N = COND 4
70	Is there any agricultural vehicle impact on or around the	Y = Q71
	earthwork (tracks, damage)?	N = Q72
71	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4

72	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 4
73	Are there any active or inactive animal burrows?	Y = Q74
		N = Q77
74	Is there any agricultural vehicle impact on or around the	Y = Q75
	earthwork (tracks, damage)?	N = Q76
75	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 5
76	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 4
77	Is there any agricultural vehicle impact on or around the	Y = Q78
	earthwork (tracks, damage)?	N = Q79
78	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 3
79	Is there any damage from natural erosion (water, wind, other)?	Y = COND 3
		N = COND 2
80	Is there any livestock damage (trampling/poaching, feeder	Y = Q81
	location problems)?	N = Q88
81	Are there any active or inactive animal burrows?	Y = Q82
		N = Q85
82	Is there any agricultural vehicle impact on or around the	Y = Q83
	earthwork (tracks, damage)?	N = Q84
83	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
84	Is there any damage from natural erosion (water, wind, other)?	Y = COND 5
		N = COND 4
85	Is there any agricultural vehicle impact on or around the	Y = Q86
	earthwork (tracks, damage)?	N = Q87
86	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 4
87	Is there any damage from natural erosion (water, wind, other)?	Y = COND 3
		N = COND 3
88	Are there any active or inactive animal burrows?	Y = Q89
		N = Q92
89	Is there any agricultural vehicle impact on or around the	Y = Q90
	earthwork (tracks, damage)?	N = Q91
90	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 4
91	Is there any damage from natural erosion (water, wind, other)?	Y = COND 4
		N = COND 3
92	Is there any agricultural vehicle impact on or around the	Y = Q93
	earthwork (tracks, damage)?	N = Q94
93	Is there any damage from natural erosion (water, wind, other)?	Y = COND 3
		N = COND 1
94	Is there any damage from natural erosion (water, wind, other)?	Y = COND 2
		N = COND 1

Key 3: extensive earthworks (including medieval and prehistoric field systems, parliamentary enclosure, extensive mineworks)

Condition 1 = good condition, no current management issues

Condition 2 = good condition, minor management issues but no action required

Condition 3 = fair condition, site may require management intervention

Condition 4 = poor condition, site requires active management

Condition 5 = poor condition with integrity of earthworks under threat, management action required

1	Are the extensive earthworks obscured or overgrown by	> 50% = Q2
	vegetation (bracken, gorse, other scrub or trees)?	< 50% = Q12
		N = Q22
2	Are any of the extensive earthworks showing damage from	> 10% = Q3
	recreational activities (footpath, bike or pony trail damage, off	< 10% = Q6
	road vehicle damage)?	N = Q9
3	Are current land management practices damaging any part of	Y = Q4
	the extensive earthwork (e.g. swaling and burning)?	N = Q5
4	Are any of the key elements (e.g. entrances and field gates)	Y = COND 5
	damaged by agricultural access (vehicular or stock) or practice	N = COND 5
	(e.g. location of cattle feeders)?	
5	Are any of the key elements (e.g. entrances and field gates)	Y = COND 5
	damaged by agricultural access (vehicular or stock) or practice	N = COND 4
	(e.g. location of cattle feeders)?	
6	Are current land management practices damaging any part of	Y = Q7
	the extensive earthwork (e.g. swaling and burning)?	N = Q8
7	Are any of the key elements (e.g. entrances and field gates)	Y = COND 5
	damaged by agricultural access (vehicular or stock) or practice	N = COND 5
	(e.g. location of cattle feeders)?	
8	Are any of the key elements (e.g. entrances and field gates)	Y = COND 5
	damaged by agricultural access (vehicular or stock) or practice	N = COND 4
	(e.g. location of cattle feeders)?	
9	Are current land management practices damaging any part of	Y = Q10
	the extensive earthwork (e.g. swaling and burning)?	N = Q11
10	Are any of the key elements (e.g. entrances and field gates)	Y = COND 5
	damaged by agricultural access (vehicular or stock) or practice	N = COND 4
	(e.g. location of cattle feeders)?	
11	Are any of the key elements (e.g. entrances and field gates)	Y = COND 4
	damaged by agricultural access (vehicular or stock) or practice	N = COND 3
	(e.g. location of cattle feeders)?	
12	Are any of the extensive earthworks showing damage from	> 10% = Q13
	recreational activities (footpath, bike or pony trail damage, off	< 10% = Q
	road vehicle damage)?	N = Q
13	Are current land management practices damaging any part of	Y = Q14
	the extensive earthwork (e.g. swaling and burning)?	N = Q15
14	Are any of the key elements (e.g. entrances and field gates)	Y = COND 5
	damaged by agricultural access (vehicular or stock) or practice	N = COND 5
	(e.g. location of cattle feeders)?	
15	Are any of the key elements (e.g. entrances and field gates)	Y = COND 5
	damaged by agricultural access (vehicular or stock) or practice	N = COND 4
	(e.g. location of cattle feeders)?	

 16 Are current land management practices damaging any part of the extensive earthwork (e.g. swaling and burning)? 17 Are any of the key elements (e.g. entrances and field gates) Y = CON damaged by agricultural access (vehicular or stock) or practice (e.g. location of cattle feeders)? 18 Are any of the key elements (e.g. entrances and field gates) Y = CON damaged by agricultural access (vehicular or stock) or practice (e.g. location of cattle feeders)? 18 Are any of the key elements (e.g. entrances and field gates) Y = CON damaged by agricultural access (vehicular or stock) or practice (e.g. location of cattle feeders)? 19 Are current land management practices damaging any part of Y = Q20 the extensive earthwork (e.g. swaling and burning)? N = Q21 20 Are any of the key elements (e.g. entrances and field gates) Y = CON damaged by agricultural access (vehicular or stock) or practice N = CON the extensive earthwork (e.g. swaling and burning)? N = Q21 20 Are any of the key elements (e.g. entrances and field gates) Y = CON damaged by agricultural access (vehicular or stock) or practice N = CON the extensive earthwork (e.g. swaling and burning)? N = Q21 20 Are any of the key elements (e.g. entrances and field gates) Y = CON the extensive earthwork (e.g. swaling and burning)? N = Q21 20 Are any of the key elements (e.g. entrances and field gates) Y = CON the extensive earthwork (e.g. swaling and burning)? N = CON the extensive earthwork (e.g. swaling and burning)? N = CON the extensive earthwork (e.g. swaling and burning)? N = CON the extensive earthwork (e.g. swaling and burning)? N = CON the extensive earthwork (e.g. swaling and burning)? N = CON the extensive earthwork (e.g. swaling and burning)? N = CON the extensive earthwork (e.g. swaling and burning)? N = CON the extensive earthwork (e.g. swaling and burning)? N = CON the extensive earthwork (e.g. swaling and burning)? N = CON the extensive earthwork (e.g. swaling and burning)? N =	D 5 ID 4 D 4 ID 3
17 Are any of the key elements (e.g. entrances and field gates) Y = CON damaged by agricultural access (vehicular or stock) or practice N = CON (e.g. location of cattle feeders)? N = CON 18 Are any of the key elements (e.g. entrances and field gates) Y = CON damaged by agricultural access (vehicular or stock) or practice N = CON damaged by agricultural access (vehicular or stock) or practice N = CON (e.g. location of cattle feeders)? N = CON 19 Are current land management practices damaging any part of Y = Q20 the extensive earthwork (e.g. swaling and burning)? N = Q21 20 Are any of the key elements (e.g. entrances and field gates) Y = CON damaged by agricultural access (vehicular or stock) or practice N = CON	D 5 ID 4 D 4 ID 3
damaged by agricultural access (vehicular or stock) or practice (e.g. location of cattle feeders)?N = CON18Are any of the key elements (e.g. entrances and field gates) damaged by agricultural access (vehicular or stock) or practice (e.g. location of cattle feeders)?Y = CON19Are current land management practices damaging any part of the extensive earthwork (e.g. swaling and burning)?Y = Q20 N = Q2120Are any of the key elements (e.g. entrances and field gates) damaged by agricultural access (vehicular or stock) or practiceY = CON N = CON	ID 4 D 4 ID 3
(e.g. location of cattle feeders)?18Are any of the key elements (e.g. entrances and field gates) damaged by agricultural access (vehicular or stock) or practice (e.g. location of cattle feeders)?Y = CON N = CON19Are current land management practices damaging any part of the extensive earthwork (e.g. swaling and burning)?Y = Q20 N = Q2120Are any of the key elements (e.g. entrances and field gates) damaged by agricultural access (vehicular or stock) or practiceY = CON 	D 4 ID 3
18Are any of the key elements (e.g. entrances and field gates) damaged by agricultural access (vehicular or stock) or practice (e.g. location of cattle feeders)?Y = CON N = CON19Are current land management practices damaging any part of 	ID 3
damaged by agricultural access (vehicular or stock) or practice (e.g. location of cattle feeders)?N = CON19Are current land management practices damaging any part of the extensive earthwork (e.g. swaling and burning)?Y = Q20 N = Q2120Are any of the key elements (e.g. entrances and field gates) damaged by agricultural access (vehicular or stock) or practiceY = CON N = CON	ID 3
(e.g. location of cattle feeders)?19Are current land management practices damaging any part of the extensive earthwork (e.g. swaling and burning)?Y = Q20 N = Q2120Are any of the key elements (e.g. entrances and field gates) damaged by agricultural access (vehicular or stock) or practiceY = CON N = CON	
19Are current land management practices damaging any part of the extensive earthwork (e.g. swaling and burning)?Y = Q20 N = Q2120Are any of the key elements (e.g. entrances and field gates) damaged by agricultural access (vehicular or stock) or practiceY = CON N = CON	
the extensive earthwork (e.g. swaling and burning)?N = Q2120Are any of the key elements (e.g. entrances and field gates) damaged by agricultural access (vehicular or stock) or practiceY = CON N = CON	
20Are any of the key elements (e.g. entrances and field gates)Y = CONdamaged by agricultural access (vehicular or stock) or practiceN = CON	
damaged by agricultural access (vehicular or stock) or practice N = CON	
	D 4
	ID 3
(e.g. location of cattle feeders)?	
21 Are any of the key elements (e.g. entrances and field gates) Y = CON	D 3
damaged by agricultural access (vehicular or stock) or practice N = CON	ID 2
(e.g. location of cattle feeders)?	
22 Are any of the extensive earthworks showing damage from > 10% =	Q23
recreational activities (footpath, bike or pony trail damage, off < 10% =	Q26
road vehicle damage)? N = Q29	
23 Are current land management practices damaging any part of Y = Q24	
the extensive earthwork (e.g. swaling and burning)? N = Q25	
24 Are any of the key elements (e.g. entrances and field gates) Y = CON	D 5
damaged by agricultural access (vehicular or stock) or practice N = CON	ID 5
(e.g. location of cattle feeders)?	
25 Are any of the key elements (e.g. entrances and field gates) Y = CON	D 5
damaged by agricultural access (vehicular or stock) or practice N = CON	ID 4
(e.g. location of cattle feeders)?	
26 Are current land management practices damaging any part of Y = Q27	
the extensive earthwork (e.g. swaling and burning)? N = Q28	
27 Are any of the key elements (e.g. entrances and field gates) Y = CON	D 4
damaged by agricultural access (vehicular or stock) or practice N = CON	ID 3
(e.g. location of cattle feeders)?	
28 Are any of the key elements (e.g. entrances and field gates) Y = CON	D 4
damaged by agricultural access (vehicular or stock) or practice N = CON	ID 3
(e.g. location of cattle feeders)?	
29 Are current land management practices damaging any part of Y = Q30	
the extensive earthwork (e.g. swaling and burning)? N = Q31	
30 Are any of the key elements (e.g. entrances and field gates) Y = CON	D 3
damaged by agricultural access (vehicular or stock) or practice N = CON	ID 2
(e.g. location of cattle feeders)?	
31 Are any of the key elements (e.g. entrances and field gates) Y = CON	D 2
damaged by agricultural access (vehicular or stock) or practice N = CON	ID 1
(e.g. location of cattle feeders)?	

Key 4: structureless sites (including cropmarks, lithic scatters)

Condition 1 = good condition, no current management issues

Condition 2 = good condition, minor management issues but no action required

Condition 3 = fair condition, site may require management intervention

Condition 4 = poor condition, site requires active management

Condition 5 = poor condition with integrity of earthworks under threat, management action required

1	Is there evidence of recreational damage at the site (e.g.	Y = Q2
	footpath, bike or pony trail erosion; off road vehicles)?	N = Q17
2	Is there any deliberate removal of material from the site with	Y = Q3
	appropriate authority (e.g. looting, metal detecting)?	N = Q10
3	Are there any damaging land management practices in	Y = Q4
	operation at the site (e.g. ploughing, swaling, habitat	N = Q7
	restoration)?	
4	Is there any agricultural vehicle damage or animal poaching?	Y = Q5
		N = Q6
5	Is the site damaged by natural erosion?	Y = COND5
		N = COND5
6	Is the site damaged by natural erosion?	Y = COND5
		N = COND5
7	Is there any agricultural vehicle damage or animal poaching?	Y = Q8
		N = Q9
8	Is the site damaged by natural erosion?	Y = COND5
	0,	N = COND5
9	Is the site damaged by natural erosion?	Y = COND5
	0 1	N = COND5
10	Are there any damaging land management practices in	Y = Q11
	operation at the site (e.g. ploughing, swaling, habitat	N = Q14
	restoration)?	
11	Is there any agricultural vehicle damage or animal poaching?	Y = Q12
		N = Q13
12	Is the site damaged by natural erosion?	Y = COND5
		N = COND5
13	Is the site damaged by natural erosion?	Y = COND4
		N = COND4
14	Is there any agricultural vehicle damage or animal poaching?	Y = Q15
		N = Q16
15	Is the site damaged by natural erosion?	Y = COND5
	0 1	N = COND5
16	Is the site damaged by natural erosion?	Y = COND4
-		N = COND4
17	Is there any deliberate removal of material from the site with	Y = Q18
	appropriate authority (e.g. looting, metal detecting)?	N = Q25
18	Are there any damaging land management practices in	Y = Q19
-	operation at the site (e.g. ploughing, swaling, habitat	N = Q22
	restoration)?	
19	Is there any agricultural vehicle damage or animal poaching?	Y = Q20
		N = Q21
20	Is the site damaged by natural erosion?	Y = COND5

		N = COND4
21	Is the site damaged by natural erosion?	Y = COND4
		N = COND4
22	Is there any agricultural vehicle damage or animal poaching?	Y = Q23
		N = Q24
23	Is the site damaged by natural erosion?	Y = COND4
		N = COND4
24	Is the site damaged by natural erosion?	Y = COND3
		N = COND3
25	Are there any damaging land management practices in	Y = Q26
	operation at the site (e.g. ploughing, swaling, habitat	N = Q29
	restoration)?	
26	Is there any agricultural vehicle damage or animal poaching?	Y = Q27
		N = Q28
27	Is the site damaged by natural erosion?	Y = COND5
		N = COND4
28	Is the site damaged by natural erosion?	Y = COND3
		N = COND3
29	Is there any agricultural vehicle damage or animal poaching?	Y = Q30
		N = Q31
30	Is the site damaged by natural erosion?	Y = COND3
		N = COND2
31	Is the site damaged by natural erosion?	Y = COND2
		N = COND1

Key 5: roofed buildings

Condition 1 = good condition, no current management issues

Condition 2 = good condition, minor management issues but no action required

Condition 3 = fair condition, site may require management intervention

Condition 4 = poor condition, site requires active management

Condition 5 = poor condition with integrity of earthworks under threat, management action required

1	Is there evidence of structural deterioration (walls, roof	Y = Q2
	collapse etc)?	N = Q9
2	Is there evidence of weather damage (storms, frost, rain)?	Y = Q3
		N = Q6
3	Is there evidence of deliberate vandalism (physical damage or	Y = Q4
	graffiti etc.)?	N = Q5
4	Is vegetation (scrub/trees) encroaching or damaging the fabric	Y = COND 5
	of the building?	N = COND 5
5	Is vegetation (scrub/trees) encroaching or damaging the fabric	Y = COND 5
	of the building?	N = COND 5
6	Is there evidence of deliberate vandalism (physical damage or	Y = Q7
	graffiti etc.)?	N = Q8
7	Is vegetation (scrub/trees) encroaching or damaging the fabric	Y = COND 5
	of the building?	N = COND 4
8	Is vegetation (scrub/trees) encroaching or damaging the fabric	Y = COND 4
	of the building?	N = COND 3
9	Is there evidence of weather damage (storms, frost, rain)?	Y = Q10
		N = Q13
10	Is there evidence of deliberate vandalism (physical damage or	Y = Q11
	graffiti etc.)?	N = Q12
11	Is vegetation (scrub/trees) encroaching or damaging the fabric	Y = COND 5
	of the building?	N = COND 4
12	Is vegetation (scrub/trees) encroaching or damaging the fabric	Y = COND 4
	of the building?	N = COND 3
13	Is there evidence of deliberate vandalism (physical damage or	Y = Q14
	graffiti etc.)?	N = Q15
14	Is vegetation (scrub/trees) encroaching or damaging the fabric	Y = COND 3
	of the building?	N = COND 3
15	Is vegetation (scrub/trees) encroaching or damaging the fabric	Y = COND 2
	of the building?	N = COND 1

Key 6: palaeoecological resource in wetlands

Condition 1 = good condition, no current management issues

Condition 2 = good condition, minor management issues but no action required

Condition 3 = fair condition, site may require management intervention

Condition 4 = poor condition, site requires active management

Condition 5 = poor condition with integrity of resource threatened, management action required

Pipe flow (the movement of water through hollow spaces in the body of the peat) can most easily be recognised by the sound of gurgling water, swallow holes in the peat into which water flows, or at outlets where water wells up on the surface from a hole in the peat.

1	Is there evidence of active or past erosion visible anywhere on	Y = Q2
	the wetland?	N = Q13
2	Is there any current erosion from flowing water channels?	Y = Q3
		N = Q10
3	Is there any collapse of exposed sections?	Y = Q4
		N = Q7
4	Is there any evidence of pipe flow (hollow channels within the	Y = Q5
	peat body) either intact or collapsed (to form channels)?	N = Q6
5	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 5
	trails) or animal poaching?	N = COND 5
6	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 5
	trails) or animal poaching?	N = COND 4
7	Is there any evidence of pipe flow (hollow channels within the	Y = Q8
	peat body) either intact or collapsed (to form channels)?	N = Q9
8	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 5
	trails) or animal poaching?	N = COND 4
9	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 4
	trails) or animal poaching?	N = COND 3
10	Is there any evidence of pipe flow (hollow channels within the	Y = Q11
	peat body) either intact or collapsed (to form channels)?	N = Q12
11	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 4
	trails) or animal poaching?	N = COND 3
12	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 2
	trails) or animal poaching?	N = COND 1
13	Is there any evidence of peat cutting or drainage works (baulks	Y = Q14
	or drainage ditches)?	N = Q21
14	Do peat sections/ditches show exposed, bare peat?	Y = Q15
		N = Q18
15	Is there any evidence of pipe flow (hollow channels within the	Y = Q16
	peat body) either intact or collapsed (to form channels)?	N = Q17
16	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 4
	trails) or animal poaching?	N = COND 4
17	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 4
	trails) or animal poaching?	N = COND 3
18	Is there any evidence of pipe flow (hollow channels within the	Y = Q19
	peat body) either intact or collapsed (to form channels)?	N = Q20
19	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 3

	trails) or animal poaching?	N = COND 2
20	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 2
	trails) or animal poaching?	N = COND 1
21	Is there any evidence of pipe flow (hollow channels within the	Y = Q22
	peat body) either intact or collapsed (to form channels)?	N = Q23
22	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 3
	trails) or animal poaching?	N = COND 2
23	Is there evidence of trackway erosion (footpaths, biking or pony	Y = COND 2
	trails) or animal poaching?	N = COND 1

References

- Albutt, T (2000) *Pollen analysis from Black Hill, Exmoor*. Unpublished dissertation, Department of Geography, University of Exeter
- Badger, J (2000) *Pollen analysis from Landacre Bridge, Exmoor*. Unpublished dissertation, Department of Geography, University of Exeter
- Carter, V (2002) *Pollen analysis from Halscombe Allotment, Exmoor*. Unpublished dissertation, Department of Geography, University of Exeter
- Chamber, FM, Macquoy, D and Todd, P (1999) Recent rise to dominance of Molinia caerulea in environmentally sensitive areas: new perspectives from palaeoecological data. *Journal of Applied Ecology* 36, 719-733
- Francis, PD and Slater, DS (1990) A record of vegetation and land use change from upland peat deposits on Exmoor. Part 2: Hoar Moor. *PSANHS* 134, 1-25
- Francis, PD and Slater, DS (1992) A record of vegetation and land use change from upland peat deposits on Exmoor. Part 3: Codsend Moor. *PSANHS* 136, 9-28
- Fyfe, RM (2000) Palaeochannels of the Exe catchment: their age and an assessment of their archaeological and palaeoenvironmental potential. Unpublished PhD thesis, Uni. Exeter
- Fyfe, RM (2005) *The palaeoecological potential of Exmoor Moorlands: Moorland units 7 and* 13. Unpublished report for ENPA, University of Exeter
- Fyfe, RM (2006) Sustainable conservation and management of the historic environment record in upland peat: a view from Exmoor International Journal of Biodiversity Science and Management 2, 146-149.
- Fyfe, RM (2008) Pollen analysis of blanket peat deposits at Roman Lode, Burcombe, Exmoor, N. Devon. English Heritage Research Dept. Report series
- Fyfe, RM, Brown, AG and Coles, BJ (2003a) Mesolithic to Bronze Age vegetation change and human activity in the Exe Valley, Devon, UK. *Proceedings of the Prehistoric Society* 69, 161-181
- Fyfe, RM, Brown, AG and Rippon, SJ (2003b) Mid- to late-Holocene vegetation history of Greater Exmoor, UK: estimating the spatial extent of human-induced vegetation change Vegetation History and Archaeobotany 12, 215-232

- Fyfe, RM, Gehrels, M and Vickery, E (2008) *Palaeoenvironmental analyses from MIRE project sites: Comerslade and Long Holcombe, Exmoor*. Unpublished report for ENPA, University of Plymouth
- Gardiner, P (2007a) Mesolithic activity at Hawcombe Head, Somerset, interim report of excavations 2002-3. In: Waddington, C and Pedersen, K (eds) *Mesolithic studies in the North Sea basin and beyond* Oxbow, Oxford
- Gardiner, P (2007b) Chasing the tail of hunter-gatherers in southwestern landscapes. In: Costen, M (ed.) *People and places: essays in honour of Michael Aston* Oxbow, Oxford
- Jackson, S (1997) The analysis of pollen diagrams from Hawkcombe Head, Exmoor, with respect to both climatic and anthropogenic influences upon the local area vegetation. Unpublished practical report and literature review, School of Geography and Biology, University of Bristol
- Jamieson, E (2001) Larkbarrow Farm, Exmoor, Somerset English Heritage Report no. AI/18/2001
- Jamieson, E (2005) Shoulsbury Castle, Exmoor, Devon. An Iron Age hillfort and a stone setting on Shoulsbarrow Common English Heritage Report no.AI/13/2005
- Jennings, H (1997) Pollen analysis from a profile in the peat at Halscombe Allotment, Exmoor Unpublished practical report and literature review, School of Geography and Biology, University of Bristol
- Jennings, S, Orford, JD, Canti, M, Devoy, RJN and Straker, V (1998) The role of relative sealevel rise and changing sediment supply on Holocene gravel barrier development: the example of Porlock, Somerset, UK *The Holocene* 8, 165-181
- Juleff, G and Bray, L (2007) Minerals, metals, colour and landscape: Exmoor's Roman Lode in the Early Bronze Age *Cambridge Journal of Archaeology* 17, 285-296
- Landuse Consultants (2004) *Moorlands at a Crossroads: the state of the Moorlands of Exmoor, 2004.* Report for the Exmoor Society. Landuse Consultants, Bristol.
- Merryfield, DL (1977) Palynological and stratigraphical studies on Exmoor Unpublished PhD Thesis, Kings College London
- Merryfield, DL and Moore, PD (1974) Prehistoric human activity and blanket peat initition on Exmoor Nature 250, 439-441
- OAN (in prep.) Upland peat survey English Heritage, Swindon

- Pattison, P and Sainsbury, IS (1989) Prehistoric earthworks on Codsend and Hoar Moor,
 Somerset. In: Bowden, M, Mackay, D and Topping, P (eds) From Cornwall to
 Caithness: some aspects of British Field Archaeology BAR British Series 209, 79-91.
- Richardson, I (1999) Ley Hill deserted medieval settlement, Horner Wood. *The National Trust Annual Archaeological Review* 7, 56.
- Riley, H (2007) *Lithic monuments on Exmoor: some new discoveries. The Warcombe Water stone row and a stone setting on Trout Hill* English Heritage Research Department report 44-2007.
- Riley, H and Wilson-North, R (2001) *The field archaeology of Exmoor* English Heritage, Swindon
- Rimmington, JN (2004) Managing earthwork monuments: a guidance manual for the care of archaeological earthworks under grassland management. Unpublished report, Proactive Earthwork Management on Hadrian's Wall Project: English Heritage.
- Rippon, SJ, Fyfe, RM and Brown, AG (2006) Beyond villages and open fields: the origins and development of a historic landscape characterised by dispersed settlement in South West England. *Medieval Archaeology* 50, 31-70
- Slade, S (1997) *Pollen analysis of Hawkcombe Head, a Mesolithic site on Exmoor*. Unpublished practical report and literature review, School of Geography and Biology, University of Bristol
- Webster, CJ (2007) The Archaeology of Southwest England: Southwest Archaeological Research Framework Resource Assessment and Research Agenda Somerset County Council, Taunton
- Wessely, H (2002) *Pollen analysis from Hoccombe Combe, Exmoor*. Unpublished dissertation, Department of Geography, University of Exeter
- Wilson-North, R and Riley, H (2004) *Exmoor Moorlands: the Historic Environment*. Unpublished briefing paper for Landuse Consultants, ENPA