A Condition Survey of the Archaeological Sites of the Cramber Tor Training Area

County:	Devon
District:	West Devon
Parish:	Sheepstor, Walkhampton
NGR (Centre):	SX 593699
Surveyed:	Nov – Dec 2013
Contractor:	S Probert
Client:	Landmarc/Defence Infrastructure
	Organisation

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A CONDITION SURVEY OF THE ARCHAEOLOGICAL SITES OF THE CRAMBER TOR TRAINING AREA, DEVON

1 INTRODUCTION

The MoD licencehold of the Cramber Tor Training Area covers approximately 841 ha, the majority of which is currently open moorland but includes 27 ha of abandoned enclosed land. The area spans two parishes. Most of the licencehold lies within Walkhampton with 127 ha at the extreme southern end of the training area forming part of Sheepstor parish. The entire area is contained within the Burrator Reservoir water catchment, which is defined by a series of boundary stones. The Walkhampton section of the training area forms part of Walkhampton Common, which has been assigned Premier Archaeological Landscape (PAL) status under the Dartmoor Futures designation.

The 2007 Baseline Survey cited 145 National Monument Record (NMR) numbers. On examination of the spreadsheet supplied there were found to be only 144 records of which four were duplicate sites. The latter remain in the spreadsheet but are not qualified by condition assessments to avoid double counting. In addition to the 140 records of extant sites are two additional sites, New1 and New2, supplied by the Dartmoor National Park HER. No NMR numbers are available for these sites. Two sites were not found. One, 438995, is probably another duplicated site, the other, 1448381, is likely to be obscured by vegetation.

Twenty eight sites are Scheduled as Ancient Monuments and protected under the Ancient Monuments and Archaeological Areas Act of 1979.

The range and general survival of the archaeological resource and preassessment activities in the Cramber Tor area have already been discussed by English Heritage, 2007.

1.1 Archaeological Baseline Survey 2007

This condition survey was undertaken in adherence to work already completed under the aegis of the **Revised Action Plan (RAP)** (2001) that resulted from the **Willsworthy Integrated Land Management Plan** of 1998. The RAP articulated a number of actions aimed at defining the nature of the archaeological resource and promoting its conservation; in effect the blueprint for heritage management on the MoD Dartmoor Estate.

The **Revised Action Plan** (March 2001) identifies five tasks that cover the maintenance and assessment of the archaeological landscape:

51 Review the current maintenance condition survey programme for scheduled sites and revise if desirable.

- 52 Produce and revise a threat assessment for all Scheduled Ancient Monuments and ensure that measures are in place to prevent damage.
- 56 Extend threat assessment to cover non-scheduled sites.
- 57 Develop a system for regular condition surveys of non scheduled sites.
- 60 Gather detailed information on potential vehicle damage to archaeological sites.

Completion of these tasks will enable the following dependent actions:

- 61 Investigate damage caused by horses and livestock.
- 62 Identify features where developing gorse cover threatens buried archaeology.
- 63 Agree and implement a system whereby farm and MOD vehicles avoid appropriate areas, keep to tracks in others.
- 64 Set up system by which routes used shall be varied, avoiding scheduled or other archaeological sites.
- 65 Prepare and carry out plan to remove gorse where necessary and prevent re-growth.

To fulfil these objectives an Archaeological Baseline Condition Survey was undertaken in 2005 and 2006 by English Heritage and presented to Defence Estates in 2007. The work involved a complete resurvey at 1:2500 scale of the training area. All previously recorded and newly discovered upstanding archaeological features were assessed for active damage and potential threat. These assessments were supplemented, when possible, by ground photography either of the monument, an element of the site or its location.

1.2 Follow up works January-March 2008

In response to issues raised by the 2007 baseline survey a series of follow up works was commissioned by Defence Estates/Landmarc in the late winter of 2008. Twenty sites were identified as being threatened by incidental factors in the form of human and animal activity or vegetation growth. Of these 11 required monitoring and the remainder remedial action. Of the latter, the responsibility for carrying out the prescribed actions for three sites was assumed by the Dartmoor National Park Authority and English Heritage. The remaining six sites were wholly or partially cleared of gorse and trees to avoid disturbance to the sub-surface remains. The sites were deemed to be in a stable condition following the completion of these works (Probert 2008).

2 ARCHAEOLOGICAL CONDITION SURVEY 2013

2.1 Methodology

This, the first Archaeological Condition Survey was carried out in November and December 2013 during which every site was revisited, including those recorded as not found by previous investigations. A photograph was taken at each site either of the whole feature or, more often, an element of the site or its location. These photographs are presented on an accompanying CD. The site and its immediate surroundings were assessed for damage, military use and potential threats. Details were recorded on a standard DIO condition form.

The location and direction of each photograph was recorded and is available as an ESRI GIS file on the associated CD. The standard DIO condition forms are synthesised in the appendix to this report and are again available as .doc and .pdf files on the accompanying CD.

All monument reference numbers referred to in this report are those assigned by the National Monuments Record (NMR).

<u>3 SUMMARY OF FINDINGS</u>

3.1 Introduction

The findings of the 2013 survey are summarised in Fig. 1 (actual numbers of monuments) and Fig. 2 (percentages). The number of stable monuments forms the bulk (136 monuments or 95.5%) of the sample while those in gradual decline constitute only 4 or 3%. There are no monuments deemed to be improving.

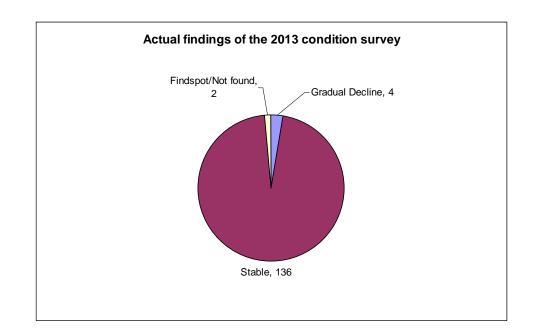


Fig 1 Actual findings of the 2013 Condition Survey

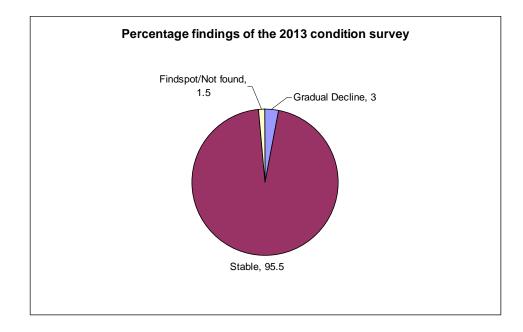


Fig 2 Percentage findings of the 2013 Condition Survey

3.2 Gradual Decline

The four monuments in this category are affected by a number of factors:

3.2.1 Vandalism

The stony matrix of the southernmost of the Eylesbarrow cairns, 438743, has been rearranged to create a small scooped shelter in the eastern side of the mound. Similar disturbance was recorded by the 2007 baseline survey and the damage rectified by DNPA/EH as part of the follow up works (Probert, 2008). However, the cairn is vulnerable to this kind of disturbance and has suffered again in the intervening years. Such action is in contravention of the Ancient Monuments and Archaeological Areas Act of 1979. It is not thought that this is a result of the military use of the area.



Fig 3 Detail of recently constructed shelter on prehistoric monument 438743 at Eylesbarrow

3.2.2 Animal damage

The wheelpit 1300628, formerly supplying power to the pumping mechanisms at Eylesbarrow Mine has been damaged by burrowing animals. A large burrow has been created above the masonry at the eastern end of the pit dislodging several stones. Fresh earth at the mouth would indicate current occupation and the lack of bedding material normally associated with badgers would suggest the presence of a fox.



Fig 4 Probable fox damage to wheelpit 1300628 at Eylesbarrow Mine

3.2.3 Bracken

Bracken is concentrated in one corner of the training area and affects parts of several monuments. Of particular note is the small tin processing works, 1446212, on the left bank of Newlycombe Lake. Despite remedial work by DNPA/EH described in the 2008 follow up works programme (Probert 2008) the ruined structure is still occupied by bracken. This has the potential to severely disrupt any sub-surface remains. The proximity of the site to the watercourse makes the use of chemical sprays impractical. The continuation of the bracken stamping strategy is to be encouraged.

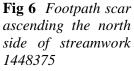


Fig 5 Bracken occupying interior of tin processing works 1446212

3.2.4 Footpath/cycleway erosion

Several of the sites at the Cramber Tor Training Area are affected by footpath erosion. In the majority of cases the damage is limited to footpaths crossing long linear features where remedial action in the form of diversions would only lead to the transfer of the problem to a different stretch of the same feature. In these cases the very localised disturbance is to be tolerated. A particular example of this is the footpath that crosses the streamworks, 1448375, on the upper reaches of the Narrator Brook. First raised as an issue by the 2007 Baseline Survey this feature was subject to monitoring in the 2008 follow up programme. Examination of the ground photography from 2008 and 2013 indicates that there has been no appreciable deterioration in the state of the monument at this point in the intervening years.





In contrast to the above example is the short length of reave, 1450575, that is visible as it crosses the Nosworthy Bridge to Peat Cot track. While it appears to be a remarkably robust feature it is slowly being reduced by foot and cycle traffic. As this is the only point at which this feature can be traced it must be regarded as in decline. Once one or more of the larger stones are displaced its disintegration will probably follow quite rapidly. The diversion of the track at this point is not only impractical but would also expose further elements of this feature.

The condition of this reave should continue to be monitored and, in the event of major deterioration a small excavation should be considered.



Fig 7 1450575. *Reave at threat from foot and cycle damage*

3.2.5 Summary

While the reinstatement of the disturbance at the Eylesbarrow cairn 438743 will restore the monument in the short term it remains vulnerable to similar activity. As with the reave 1450575 the process of monitoring at regular intervals should be continued. The continuance of the 'bracken stamp' programme at the small tin processing site 1446212 will eventually lead to its removal from the Gradual Decline category.

The practicality and even the efficacy of removing the burrowing animals from the wheelpit 1300628 at Eylesbarrow Mine are doubtful. It is hoped that in the medium term the damage will stabilise.

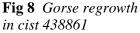
3.3 Stable

The majority, 95.5%, of the archaeological resource consists of monuments in a stable condition. In general the condition and state of survival of most archaeological features are determined by their remote positions, their distance from the main footpaths and the foci human activity. They are generally in a good state though several may become vulnerable to damage from threats 3.3.1 and 3.3.2

3.3.1 Vegetation

The reduced stocking levels have resulted in a significant increase in the areas covered by shrubs such as gorse and heather and purple moor grass. The issue of undergrazing and the subsequent spread of gorse in particular has already been raised by the 2007 baseline survey. A result of this was the scrub clearance carried out in the 2008 follow up programme (Probert 2008). Amongst the features cleared of gorse were three small cists, 438861, to the northeast of Down Tor. The most recent condition survey has noted the presence of small gorse shoots within these features. It is anticipated that by the time of the next assessment the plants will be sufficiently large to threaten these features once more.





3.3.2 Livestock

Despite the reductions in stocking levels in recent years livestock still has a direct impact on the archaeological resource. Many of the 20th century boundary stones marking the reservoir watershed possess erosion hollows at their bases. These stones are being used by livestock, cattle in particular, as rubbing posts. In extreme circumstances the stones may become unstable and topple. Examples are boundary stones 1063660 (Fig 9) and 1063810.



Fig 9 Recumbent boundary stone 1063660

Several water-filled hollows and bare peaty patches have, since the 2007 baseline survey, caused concern at the Down Tor stone row, 438583 (Fig 10). These also appear to be largely the result of livestock activity as the main footpath in the area does not intrude directly upon the row. None of the stones with basal hollows appear to be unstable in their sockets.



Fig 10 Waterfilled erosion hollow at Down Tor stone row 438583

3.3.3 Summary

Aside from the specific cases detailed above some small scale footpath erosion of the larger linear monuments is inevitable and, while restricted to a small number of crossing points, is to be tolerated. The current monitoring programme should provide sufficient information for a programme of intervention to prevent decline.

4 COMPARISON OF FINDINGS

4.1 2007 and 2013 Surveys

The relative quantities of each condition type in the 2007 Baseline and 2013 Condition Surveys can be seen in Figs 11 and 12.

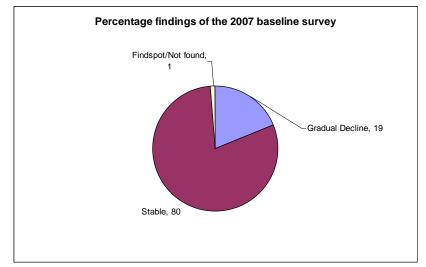


Fig 11 Percentage results of 2007 Baseline Survey

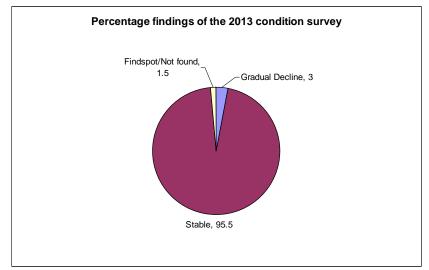


Fig 12 Percentage results of 2013 Condition Survey

The figures appear to show an improvement in the condition of the heritage resource on the Cramber Tor Training Area, the stable category expanding to 95.5% of the total from a 2007 level of 80%. However, there has been no major change in landuse or management. By its very nature the 2007 Baseline Survey had no prior assessment to draw upon therefore condition assessments were largely tentative. With the exception of extreme examples such as the cairns 438743 and 438589 the 2013 survey has served to qualify the 2007 data, removing the inevitable speculation and ambiguity. Subsequent assessments will be capable of quantifying changes in the state of the heritage resource. There is no apparent evidence of deliberate damage to the ruined farmsteads and 19th century mine structures suggested by the 2007 Baseline Survey while the decline recorded by the same survey in many sites such as the streamworks 1313092 and 1446222 is so negligible as to be irrelevant.

4.2 Scheduled Ancient Monuments

The above caveats are also relevant to this section.

The premature suspension of the Monuments Protection Programme has resulted in the omission of many sites in the Cramber Tor area that would normally have been deemed suitable for inclusion in the Register of Scheduled Monuments.

Fig 13 (below) shows the 2007 condition of the Scheduled Monuments (SM) within the Cramber Tor Training Area. Fig 14 presents the 2013 assessment of the same dataset.

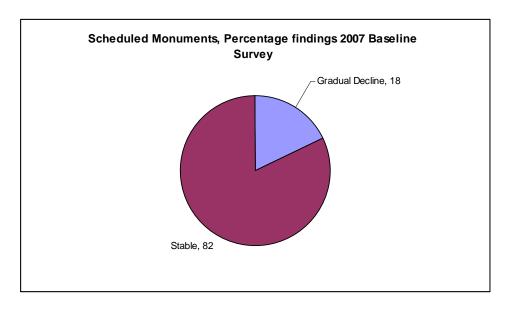
	SAM	NGD		
DIO No	No	NGR	Condition	Stability
NMRE438556	10742	SX 5905 6852	POOR	STABLE
NMRE438574	10737	SX 5869 6784	POOR	STABLE
NMRE438577	34466	SX 5810 7878	FAIR	STABLE
NMRE438580	24083	SX 5864 6931	FAIR	STABLE
NMRE438583	24084	SX 5968 6925	GOOD	STABLE
NMRE438586	24121	SX 5911 6947	GOOD	STABLE
NMRE438589	24122	SX 5919 6944	FAIR	DECLINING
NMRE438592	10750	SX 5799 6827	FAIR	STABLE
NMRE438743	10739	SX 5996 6860	FAIR	DECLINING
NMRE438806	24123	SX 5966 6981	POOR	STABLE
NMRE438861	24051	SX 5838 6956	FAIR	STABLE
NMRE438950	10742	SX 5908 6831	POOR	STABLE
NMRE438983	24082	SX 5857 6926	FAIR	STABLE
NMRE438986	10626	SX 572- 670-	POOR	STABLE
NMRE440023	22386	SX 5917 7029	GOOD	STABLE
NMRE440026	22381	SX 5774 7025	FAIR	STABLE
NMRE440094	22391	SX 5837 7040	GOOD	STABLE
NMRE440199	22389	SX 5967 7001	POOR	STABLE
NMRE440219	24068	SX 5809 7004	FAIR	DECLINING

NMRE441591	24133	SX 6047 6992	GOOD	STABLE
NMRE619135	10745	SX 5839 6814	GOOD	STABLE
NMRE619136	10746	SX 5800 6807	GOOD	STABLE
NMRE1172972	22392	SX 5833 7059	GOOD	STABLE
NMRE1300505	34467	SX 5990 6821	GOOD	DECLINING
NMRE1332225	24124	SX 6955 6976	FAIR	STABLE
NMRE1343106	24069	SX 5825 7016	FAIR	DECLINING
NMRE1386458	34472	SX 5894 6848	POOR	STABLE
NMRE1451175	10745	SX 5834 6822	POOR	STABLE

Fig 13 *Tabulated condition and stability of Scheduled Monuments, 2007 Baseline Survey*

	SAM			
DIO No	No	NGR	Condition	Stability
NMRE438556	SM10742	SX5906968517	POOR	STABLE
NMRE438574	SM10737	SX5669067839	POOR	STABLE
NMRE438577	SM34466	SX5910768779	FAIR	STABLE
NMRE438580	SM24083	SX5864069309	FAIR	STABLE
NMRE438583	SM24084	SX5883969320	GOOD	STABLE
NMRE438586	SM24121	SX5911569472	GOOD	STABLE
NMRE438589	SM24122	SX5919969447	FAIR	STABLE
NMRE438592	SM10750	SX5799268273	FAIR	STABLE
NMRE438743	SM10739	SX5996768596	FAIR	GRADUAL DECLINE
NMRE438806	SM24123	SX5966469807	POOR	STABLE
NMRE438861	SM24051	SX5838869558	FAIR	STABLE
NMRE438950	SM10742	SX5909068322	POOR	STABLE
NMRE438983	SM24082	SX5861569209	FAIR	STABLE
NMRE438986	SM10626	SX5898368280	POOR	STABLE
NMRE440023	SM22386	SX5918370298	GOOD	STABLE
NMRE440026	SM22381	SX5788570265	FAIR	STABLE
NMRE440094	SM22391	SX5837870397	GOOD	STABLE
NMRE440199	SM22389	SX5967070018	POOR	STABLE
NMRE440219	SM24068	SX5822470008	FAIR	STABLE
NMRE441591	SM24133	SX6047469937	GOOD	STABLE
NMRE619135	SM10745	SX5838468169	GOOD	STABLE
NMRE619136	SM10746	SX5803368046	GOOD	STABLE
NMRE1172972	SM22392	SX5843570519	GOOD	STABLE
NMRE1300505	SM34467	SX5930968214	GOOD	STABLE
NMRE1332225	SM24124	SX5956469740	FAIR	STABLE
NMRE1343106	SM24069	SX5825870166	FAIR	STABLE
NMRE1386458	SM34472	SX5895168486	POOR	STABLE
NMRE1451175	SM10745	SX5835068221	POOR	STABLE

Fig 14 *Tabulated condition and stability of Scheduled Monuments, 2013 Condition Survey*



Figs 15 and 16 display the percentage findings of the above data.

Fig 15 Relative stability of Scheduled Monuments, 2007 Baseline Survey

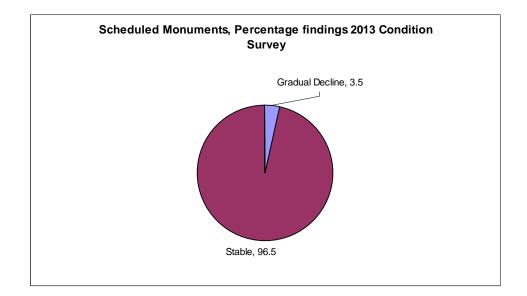


Fig 16 Relative stability of Scheduled Monuments, 2013 Condition Survey

The Scheduled Monument data is an almost exact reflection of the overall dataset, displaying a marked decrease in the number of sites in Gradual Decline and a corresponding rise in the Stable category. Again, this can be attributed largely to the 'bedding in' of the 2007 data.

5 CONCLUSION

The vast majority of the recorded archaeological sites within the Cramber Tor Training Area can be regarded as stable though there remains an element of gradual decline. In addition there exist several potential threats that may, in the medium to long term, result in the decline in stability of several monument types as discussed in paragraphs 3.3.1 and 3.3.2.

Despite the above, the heritage resource at the Cramber Tor Training Area is statistically the most stable of the most recently assessed Dartmoor ranges. Condition Surveys of Willsworthy (Probert 2013), Ringmoor (Probert 2010) and Merrivale (Probert 2010) have described stability percentages of 87, 81 and 71 respectively. At Cramber a major contributing factor to this state of stability is the prompt, targeted action of DIO/Landmarc in partnership with the Dartmoor National Park Authority and English Heritage.

If the current stocking levels are maintained or reduced and vandalism is promptly rectified there appears to be no reason why the stability of the archaeological resource cannot be maintained.

Simon Probert 04 January 2014

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Probert, S 2013 A Condition Survey of the Archaeological Sites of the Willsworthy Freehold, Dartmoor Training Area. Landmarc/DIO

Appendix Synthesised summary of DIO field sheets