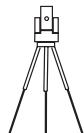


Archaeological Sites within Ringmoor Training
Area, Dartmoor National Park, Devon:
A condition survey on behalf of Defence
Infrastructure Organisation

March 2018



Southwest Landscape Investigations



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A pillow mound on Ringmoor Training Area.

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DVD containing GIS .shp files; ground photography; DIO HAC survey forms; Excel spread sheet

INTRODUCTION

A survey was requested by Defence Infrastructure Organisation (DIO) as part of the on-going management and monitoring of heritage assets within the Ringmoor Down Training Area. The purpose of the work is to provide an updated condition assessment for all known archaeological sites within the training area (TA). This includes scheduled monuments (SMs) and non-scheduled sites recorded in the Dartmoor HER and the National Monument Record (NMR), but excludes listed buildings. The revised survey was undertaken in December 2017. Previous condition surveys have been completed on Ringmoor in 2010 and 2005.

The Survey Area (Fig. 1)

Ringmoor Down is the smallest in area of the Dartmoor training areas (DTAs), and covers 610ha within the southwestern sector of Dartmoor National Park. The boundary is formed by the Drizzlecombe Brook and River Plym on the east and south, while the northern side and western end are defined approximately by the limit of enclosed land at Sheepstor, as well as a road which cuts through Lynch Common. The south-western corner is defined by the enclosure boundaries of Brisworthy. The majority of the land falls within the parish of Sheepstor, only the western sector, including Lynch Common, lies within Meavy.

The entire area is open moorland designated as Access Land, though much of Ringmoor Down itself is enclosed by stock-proof fencing with numerous access points for walkers. However, Lynch Common and the area to the east of Sheepstor Brook, remain unenclosed. Vehicular access to the area is restricted to two rough trackways, one to Eylesbarrow and one to Ditsworthy; neither are available for use by the public, other than on foot, at any time.

Although Ringmoor is the smallest of the DTAs, it has a higher comparative concentration of scheduled monuments per square kilometer where, of the total archaeological sites recorded, 46.7% are SMs, giving seven SMs per km² which is more than double any of the other DTAs.



Fig 1. Dartmoor National Park showing DIO Dartmoor Training Area, with Ringmoor TA highlighted.

Methodology

The current condition survey is the third of its kind on Ringmoor Down, and follows earlier surveys in 2010 by S Probert and in 2005 by English Heritage, the latter forming the original baseline survey. The essential methodology of the condition survey has not changed and requires a field inspection and report for all the heritage assets listed in previous surveys. Any deterioration or improvement in condition is noted, and recommendations are made as to future management. Photographic evidence for each heritage asset acts as a visual means of monitoring site condition over time, and digital photographs from each survey are archived by DIO for back reference.

The current survey has made use of the 2005 EH baseline survey of Ringmoor TA as a means of establishing location and extent of the archaeological sites recorded in that report. Since the 2005 survey, only one additional site has been added to the baseline list.

Of the 91 heritage assets for which records now exist, 43 form the whole or part of scheduled monuments (SMs), or they are within the protected zone of a SM.

The 2017 condition survey was conducted using pro-forma sheets (in digital format) to record field observations, with the results collated into an Excel spreadsheet. Condition photographs are filed using the monument numbers, enabling cross-referencing with the spread sheet. Location and approximate extent of each monuments is presented in GIS polygon format (.shp). Each entity in the GIS file also has a short descriptive field. The results are summarized in this report, which also highlights any issues that may require conservation action.

Training Area Name	Size in Kms ²	Monuments recorded	SAMs	%SAM	SAMs per Km ²
Ringmoor	6.1	92	43	46.7	7
Cramber	8.4	146	28	19	3.3
Willsworthy	14.5	184	29	15.5	2
Merrivale	33.2	140	30	21.5	1.05
Okehampton	61.8	272	56	20	1.1

Table 1 Demonstrating high percentage of SMs and SMs per Km² compared with the larger Dartmoor TAs.

LEGACY CONDITION AND MONUMENT TYPE

Condition of field monuments is to some extent dependent on their age. A prehistoric site, which may be up to 4000 years old at Ringmoor, may have less visible fabric but has had much longer to decline and stabilise than a ruined 20th-century structure, whereas the condition of modern sites can decline rapidly if unprotected and subject to neglect and abuse. Clearly, a consistent approach when applying a condition category is difficult for an assemblage of monuments with such a diversity of ages. Allowances therefore have to be made for the legacy condition, which is described below for each category. For the purposes of this survey the *Condition* terms (good, fair, poor) have to take this into account but are still somewhat arbitrary depending on the observer. However, the *Stability and Change* record for each monument is more accurately gauged and is related solely to damage, threats or other management issues visible at the time of inspection. These observations can be cross-referenced to past inspections to establish whether the site's status has declined, improved or remains static since previous assessments.

The archaeology of Ringmoor Training Area can be broken down into nine distinct categories, based on chronological period and site types:

Prehistoric burial – cairns

Prehistoric ritual – stone circles, stone rows

Prehistoric settlement – hut circles, enclosed settlements and reaves

Medieval agriculture – field system, cultivation ridges

Medieval/post-medieval settlements

Medieval/ post medieval industrial – tinworking

Post-medieval – 20th-century rabbit warrenning

Nineteenth-century tin mining

Miscellaneous (mostly post-medieval) – boundary stones and large stone artefacts

This is a fairly typical assemblage of archaeological site types found on Dartmoor's moorlands, although the area is particularly well endowed with prehistoric, enclosed hut settlements and isolated medieval farmsteads. This section of the Plym valley also possesses some of Dartmoor's best examples of rabbit warrens, including Ditsworthy and Legis Tor Warrens which lie within the Ringmoor TA. However, prehistoric reaves are not common within the area, with only one major example, and there is a shortage of structures associated with the tin industry, compared to other areas within the very near locality.

Ritual

Brisworthy stone circle (438683) is one of only 14 certain stone circles to survive on Dartmoor. Though some stones are known to be missing and the site was restored in 1909, it is an impressive and significant monument, dating probably from the early 2nd millennium BC. The retaining circle on the southern end of Ringmoor stone row (438671) also survives in place though many of the stones in the row itself appear to have been removed. This row is likely to be the earliest extant monument on Ringmoor Down, dating possibly from as early as the third millennium BC. As with all orthostatic monuments there is a risk of individual stones being toppled, usually through a combination of erosion around the base and use by animals as rubbing posts.

Cairns

There are 17 records for prehistoric round cairns or barrows in the training area, of which all are scheduled. The most significant of the cairns as landscape features are the larger examples, including two large diameter, flat topped earthen mounds on the western ridge of Ringmoor Down (438668) and one adjacent to the road near Nattor (438604). There are six smaller cairns containing stone cists (438610; 438656; 438659; 438677; 438689; 438692), though all have been disturbed. A number of small, low, stony or earthen mounds may also be included in this group of cairns, though in some cases the remains are barely perceivable.

Cairns were frequent targets for interventions by antiquaries in the past, often leaving the remains heavily disturbed with results unrecorded. Most of the above examples show signs of interference, especially the cists, which have all been opened.

Hut circles and settlements

Records exist for eighteen sites where prehistoric settlements survive with elements of enclosure walls and/or containing one or more hut circles or round houses. Most stone hut circles and their associated settlements probably had origins in the early-mid 2nd millennium BC, though some are known to have been occupied/reoccupied many centuries later. The largest and most impressive of these is at Whiteknowles Rocks (438638) where a kidney-shaped stone enclosure of 4.7ha contains over 30 stone hut circles with upstanding remains. There is also an impressive array of several enclosures, with many associated hut circles, spread along the lower, southern flank of Legis Tor, near the Plym river. These include one agglomerated settlement of eight attached enclosures, covering 6ha and containing 13 hut circles with vestigial evidence for an additional external field system (438698). A further concentration of hut settlements survives on Eastern Tor (438644; 438641), where some fine huts remain. Smaller, less well preserved, settlements exist on Gutter Tor (438650; 1240107). Southwest of Gutter Tor a group of 10 huts with associated vestiges of enclosure (438662) are, untypically for this part of Dartmoor, almost completely turf-covered.

Many of Dartmoor's hut circles have been subject to archaeological investigation in the past, principally in the late 19th century, though, unlike cairns, these have usually been recorded to some extent. Notable within Ringmoor TA is the settlement described above at Legis Tor (438698), where ten of the huts were explored in the late 19th century. For

Whiteknowles, however, no record of an excavations is known. Robbing of stone by later wall builders is also likely to have affected these sites, especially in the vicinity of the 19th-century warren enclosures around Eastern Tor. The overgrowth of bracken, particularly over the Legis Tor settlements, renders much detail of the monuments difficult to observe.

Reaves

Reaves (prehistoric linear boundary banks) are common over much of western Dartmoor, but only one has been recorded within Ringmoor TA (438986), and this is scheduled. These linear banks of earth and stone are normally very stable and insusceptible to casual damage. One of the main threats to reaves on Dartmoor generally, is traversing by heavy wheeled vehicles. However, the reave across Ringmoor is well away from the area where vehicles are used and currently under no such threat.

Medieval/post medieval agriculture

Ringmoor Down and Lynch Common (1409366; 438858) contain extensive evidence of medieval/post medieval field systems, some of which were certainly associated with the deserted settlements around Legis Lake and Gutter Tor (*see below*). Turf banks were constructed to divide the landscape into fields, some of which contain earthwork evidence of cultivation (ridge and furrow). The main threat to similar features elsewhere on Dartmoor has come from off-road vehicles, however, Ringmoor and Lynch Common have witnessed very little off road activity and the field banks continue to survive in good condition, though Lynch Common does suffer from gorse and bracken overgrowth.

Medieval/ post medieval settlements

Five (438837; 438821; 438843; 438834; 438831), possibly six (438932), deserted settlement survive as ruined stone structures, with attached yards and closes, within Ringmoor TA. None of these sites have been excavated but, based on other examples on Dartmoor, for which dating information is available, their occupation would have been loosely within the medieval or post-medieval period. All comprise turf-covered outline foundation ruins, representing the remains of rectangular structures, including longhouses as well as additional smaller buildings. Despite the significance of these sites, which is heightened by their close proximity to each other, only one is scheduled (438821), and in this case mainly because it lies within the prehistoric enclosure of Whiteknowles Rocks.

Medieval/post-medieval industrial

Tin streamworking covers a vast area of land within Ringmoor TA, covering the river courses of the Plym, Drizzlecombe Brook, and Legis Lake (1063602), and Sheepstor Brook (1313022), while extensive evidence for prospecting in the form of pitworkings is spread across Ringmoor Down and Lynch Common (1408405). Although many tinworks are scheduled elsewhere on Dartmoor, none within this training area have been so designated.

Tinworking remains of this type represent episodes of major upheaval within the landscape, sometimes for considerable periods of time, followed by abrupt abandonment. The activity leaves deep scars rather than the more subtle evidence of some other past activities. The interiors of the tinworks comprise much discarded material left behind by the extraction process, now often overgrown by turf. Despite the inherent robustness of tinwork remains they have, over time, become subject to encroachment by mires, which, in some cases, such as at the head of Legis Lake and Sheepstor Brook, have completely obscured parts of the evidence and rendered large areas inaccessible. Beyond this, they have not been subject to robbing or re-use of stone and survive, as far as can be known from observation, largely undisturbed. Artificial water courses (leats) associated with tinworks survive as earthworks (1245304; 1247343), often heavily silted to the point of being difficult to trace. Pit works of various size and extent are found in several places across Ringmoor Down, but have not been subject to any interference since they were abandoned, though the soft earth of the spoil mounds has in some cases made a home for burrowing animals.

Small rectangular buildings or shelters are commonly associated with the tinworks, often built within the worked area, and usually referred to as tinners' huts or lodges. Only a single, rather poor, example has been recorded within this area, beside the River Plym (438935).

There are remains of two, small, late 18th- to early 19th-century metal mines within Ringmoor Down TA (1408401; 1408397). The surface remains comprise shafts, with spoil heaps, leats, infrastructure and ruined buildings. At one of these sites (1408401) the earthwork components of a stamping mill survive adjacent to a pull-in car park, the construction of which has partly encroached on the remains.

Rabbit Warrens

Ringmoor Down TA contains two former rabbit warrens, Ditsworthy (438818) and Legis Tor (438828), which were first recorded in the 17th and 18th centuries respectively, and were still operating in the early 20th century. These two form part of a significant concentration of warrens in the moorland Plym valley, which has three others on the south side of the river. The main field evidence comprises the pillow mounds, of which Ditsworthy has 50 and Legis 49 examples surviving. These earthwork mounds are, on average, 16m by 7m by 1m high though some are much larger; most have ditches and they all survive in good condition. Field boundaries associated with the warrens, are likely to represent other forms of farming on the same space as the warrens, either contemporary or earlier. Stone vermin traps, used to catch stoats and weasels, survive within the warrens. Their funnel walls survive in most cases though the stone trapping chambers have often been disturbed. However, two survive in a virtually intact state (1325839; 1304864), and of these, only the former is scheduled, though two others within Legis Tor Warren, are protected as part of the scheduled prehistoric settlements (1409406; 1409239). No pillow mounds are scheduled individually, though several are also covered by the designation of the prehistoric settlements, where constructed within them.

THE CONDITION SURVEY: RESULTS

Condition

Of the 96 sites listed within previous reports (2010), two were recorded as finds (438824; 438900), which have not been included in the 2017 survey. An additional two sites were recorded as ‘destroyed’ (439037) or ‘not found’ (1409613). A total of 92 sites have therefore been visited for the 2017 survey, of which one (1408427) is not an antiquity and has been omitted from the statistics, though is present on the Excel spread sheet.

Of the 91 sites included in the 2017 statistics, 38 (41%) may be stated to be in good condition, 31 (34%) in fair condition and 22 (24%) in poor condition. In the 2010 survey (of 90 sites) the figures differed slightly with 43 (47.8%) in good condition, 30 (33.3%) in fair condition and 14 (15.5%) in poor condition.

However, of the 43 SMs, only eight (18.6%) can be stated to be in good condition in 2017, while fifteen (34.8%) are in a poor condition and 20 (46.5%) are fair condition. This compares with the 2010 statistics of 14 good (34%), 17 fair (41.5%), 7 poor (17%). The variation in these statistics is due, in the most part, to the subjectivity of this form of assessment (which has to include varying degrees of legacy damage) rather than any actual change in condition since 2010.

Stability and Change

This, more objective, category of assessment, measures the extent to which a heritage asset may be said to be stable or otherwise, and notes any changes since previous inspections. It also acts as an indicator as to whether intervention may be beneficial in halting any observed decline, especially where caused by human agency.

Under this measurement, 75 (82% - down 6% on 2010) of the total sample remain in a stable condition, while fifteen (16% - up 10% on 2010) are reported as in gradual decline (Table 2; Fig 2), in most cases this is due to very insignificant patches of erosion or minor threats.

However, this increase is also skewed slightly because, whereas three sites on the 2010 survey were stated as improving (438671; 1311114; 1409367), this is not the case in 2017 as all three have suffered adversely in the intervening seven years and are now in gradual decline. Without this ‘swing’ the condition statistic for gradual decline would be up only slightly (12% of total), on the 2010 survey (6.7%), which, considering the time that has lapsed since that survey, must be seen as an encouraging result.

The figures are as follows: The table includes the statistics from previous surveys for comparison:

2017 survey of 91 heritage assets assessed		No.	% of total
Stable		75	82.5
Gradual Decline		15	16.5
Rapid Decline		0	0
Improving		0	0
Unknown		1	1
2010 survey of 90 heritage assets assessed			
Stable		81	89
Gradual Decline		6	6.6
Rapid Decline		0	0
Improving		3	3.3
2005 baseline survey of 89 heritage assets			
Stable		67	75.5
Gradual Decline		22	24.5
Rapid Decline		0	0
Improving		0	0

Table 2 Showing actual numbers and percentages of the total in terms of stability and change.

These figures represent a decrease of 6% in the total number of heritage assets reported to be in a stable condition, while those considered to be in gradual decline has increased by nearly 10%, which when normalized in the light of the anomaly referred to above, suggests only a minor real terms decline in condition of the monuments within the aggregate statistics for this TA.

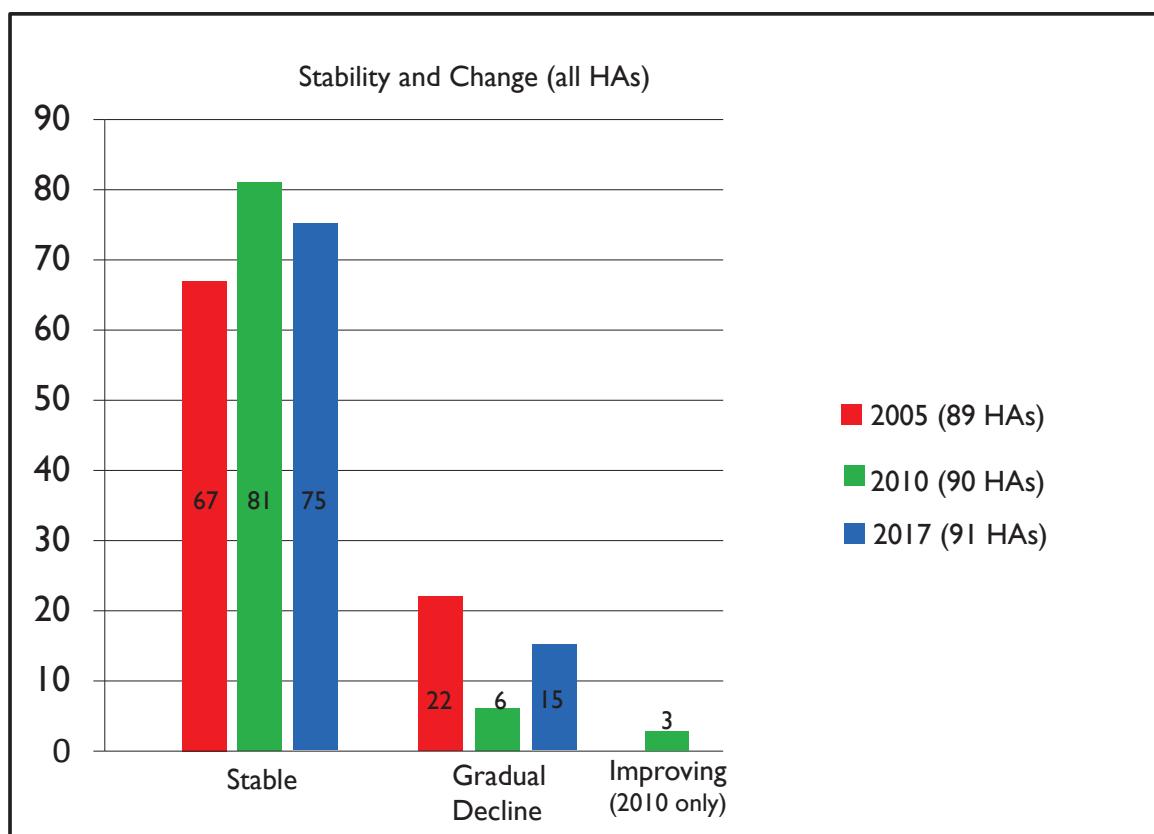


Fig. 2 Graph presenting the statistics for stability and change for all heritage assets (HA) recorded in Ringmoor TA.

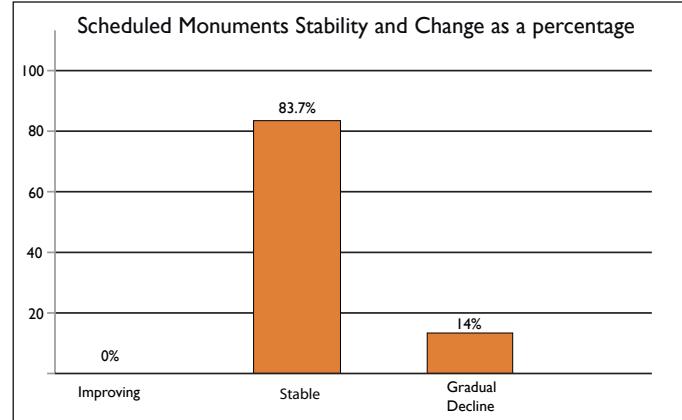
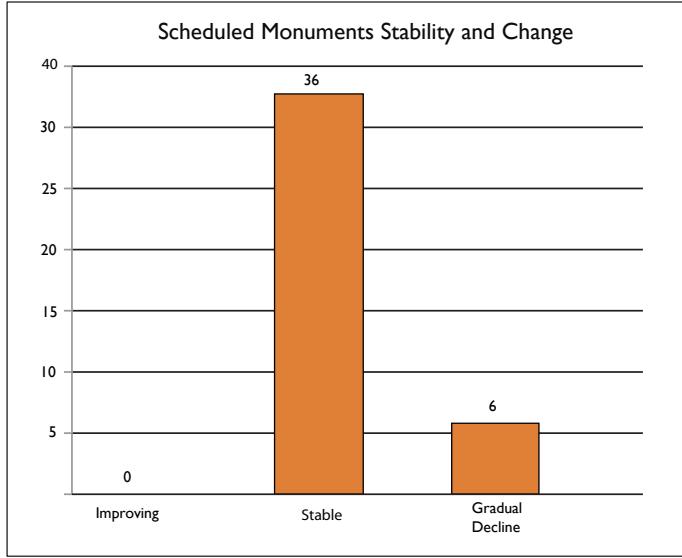


Fig. 3 (left) Graph showing the number of scheduled monuments in defined categories, March 2018.

Fig. 4 (right) The same information expressed as a percentage.

MANAGEMENT ACTIONS

Management measures

No management measures are currently in use for any of the sites, scheduled or unscheduled, within Ringmoor TA. The threat levels are minimal in this training area where use of vehicles is not permitted and no form of live ordnance is used. Stocking levels of sheep, cattle and ponies are low. The pressure from civilian visitors is present though negligible.

SCHEDULED MONUMENTS

Of the 43 SMs 36 (83.7%) are in a stable state and only six (14%) are in gradual decline. In all cases through forces of attrition and in no case through accidental or wanton damage by humans. In all but two of these cases, no immediate action other than continued monitoring is necessary (nb. One SM [438656] is omitted from these statistics, recorded as condition unknown - see appendix 1).

Gradual decline requiring attention

438668 (SM No: 1012254) The southern of two flat-topped round cairns on Ringmoor Down is threatened by cattle poaching and seasonal water erosion around its base, especially on the eastern side. Water is also accumulating in a hollow on top of the monument, creating a seasonal aquatic habitat, though clearly this has been occurring for a very long time.

438671 (SM No: 1012246) The Ringmoor stone row has declined notably in condition since 2010. Several of the stones have suffered livestock poaching around their base and the ensuing hollows have accumulated water, which in turn has eroded more soil. None of the stones are believed to be in danger of toppling at the time of survey, but this will be a risk if mitigation is not undertaken soon. In the 2010 condition survey it was reported that these hollows were regenerating but the situation now seems to have reversed.

Gradual decline requiring monitoring

438647 (SM No: 1012053) A stony round cairn SW of Ditsworthy frequently suffers interference with stones being dislodged. This is not a serious threat to the monument at present.

438959 (SM No: 1012281) A ring cairn adjacent to the Eylesbarrow reave. Use of the reave as a trail for walkers is causing churning of the ground at the very edge of the cairn, especially during wet weather. A potential threat if the trail expands.

438986 (SM No: 1017395; 1017396; 1011977; 1011958) The Eylesbarrow Reave (Ringmoor section). Various sections of the reave have a closely adjacent trail caused by walkers, which becomes churned in wet weather. A potential threat if the trail expands.

1318967 (SM No: 1021055) Stamping mill no 6 of Eylesbarrow Mine. The revetment wall of the tin dressing floor has suffered some collapse in recent years. Although beginning to stabilise, the damage requires further monitoring, to ensure that further sections do not also collapse.

438683 (SM No: 1012227) Brisworthy Stone Circle. Minor livestock poaching at the base of several of the stones and a footpath through the centre of the circle are not currently significant, but require monitoring to check any escalation of the effects.

NON-SCHEDULED MONUMENTS

There is little to report in the way of specific damage or erosion at individual non-scheduled sites in Ringmoor TA. However, it is worth noting that three sites highlighted in the 2010 condition survey are still in gradual decline.

1311114 A vermin trap which straddles the base of a tinwork is being eroded by a footpath across the gully.

1313030 A medieval enclosure near the parking area at Nattor, is being eroded by cyclists.

1409367; 1409369 Two boundary stones have suffered erosion and water logging around their base. The problem is caused primarily by cattle/sheep erosion and exacerbated by water accumulating in the resulting hollow. However, neither of the stones appear to be in imminent danger of toppling.

CONCLUSION

Apart from minor problems highlighted above, the survey and resulting statistics reveal that the great majority of heritage assets within Ringmoor Training Area survive in a good to fair condition, those that are classified as poor are mainly so by way of legacy. In terms of stability and change, although the percentage of sites reckoned to be in gradual decline has risen from 6% to 16% since the last survey of 2010, this is due mainly to minor erosion, which requires only monitoring, and a reverse in the fortunes of three specific monuments. No sites may be stated to be in either rapid decline or an improving state. Only two sites (both SMs) are recommended to receive consideration regarding conservation, though both appear to be suffering as a result of natural forces, not through any human intervention. Although of the 43 SMs, six are reported as in gradual decline, this should be seen as an encouraging result given the high concentration of SMs per hectare within this training area compared with Dartmoor's other TA's, and the extremely minor nature of the problems reported.

REFERENCES

English Heritage 2005 *Ringmoor Training Area Monument Baseline Condition Survey*. NMRC Swindon

Probert, S 2010 *A Condition Survey of the Archaeological Sites of the Ringmoor Training Area, Dartmoor*. Unpub report.



Fig 5. 438668 (SM No: 1012254) The southern of two flat-topped round cairns on Ringmoor Down is threatened by cattle poaching and seasonal water erosion around its base, especially on the eastern side.



Fig 6. 438671 (SM No: 1012246) The Ringmoor stone row has declined notably in condition since 2010. The point where the row meets the later boundary wall is very eroded.



Fig 7. 438671 (SM No: 1012246) The Ringmoor stone row. Poaching and water erosion around the base of the upright stones.



Fig 8. 438671 (SM No: 1012246) The Ringmoor stone row. Poaching and water erosion around the base of the upright stones.



Fig 9. 438671 (SM No: 1012246) The Ringmoor stone row. Poaching and water erosion around the base of the upright stones.



Fig 10. 438959 (SM No: 1012281) A ring cairn adjacent to the Eylesbarrow reave. A track way (bottom left) is very close to the monument.



Fig 11. 1318967 (SM No: 1021055) Stamping mill no 6 of Eylesbarrow Mine. The revetment wall of the tin dressing floor has suffered some collapse in recent years. Although beginning to stabilize.



Fig 12. 438683 (SM No: 1012227) Briseworthy Stone Circle. A footpath through the monuments is apparently in regular use.



Fig 13. 1311114 A vermin trap which straddles the base of a tinwork is being eroded by a footpath across the gully.