METRIC SURVEY ON HOAR MOOR, EXFORD, EXMOOR NATIONAL PARK Exmoor Mires Partnership EHM19 PROJECT REPORT

By Hazel Riley



METRIC SURVEY HOAR MOOR, EXFORD, EXMOOR NATIONAL PARK Exmoor Mires Partnership EHM19

PROJECT REPORT

By Hazel Riley

Date of report: March 2019 Copyright: © The author

Hazel Riley BA (Hons), ACIFA, FSA
Consultant in Landscape History, Management and Conservation Grazing
The Furley Herd of Dexter Cattle
New House Cottage
Furley
Axminster
Devon
EX13 7TR
01404 881330
hazelfurleydexter@btinternet.com

CONTENTS

ABBREVIATIONS

ACKNOWLEDGEMENTS

LIST OF FIGURES AND IMAGE ACKNOWLEDGEMENTS

I.0 EXECUTIVE SUMMARY

2.0 INTRODUCTION

3.0 OBJECTIVES

4.0 METHODOLOGY

5.0 RESULTS

6.0 DISCUSSION

7.0 REFERENCES

OASIS PROJECT NO 341352

ABBREVIATIONS

CRAAGS Committee for Rescue Archaeology in Avon, Gloucestershire and Somerset

EH English Heritage

EMP Exmoor Mires Partnership

ENPA Exmoor National Park Authority

ETRS89 European Terrestrial Reference System 1989

GPS Global Positioning System

HE Historic England

HER Historic Environment Record

NMP National Mapping Programme

NMR National Monuments Record

OSGB36 Ordnance Survey Great Britain 1936 (National Grid)

OSGM15 Ordnance Survey Geoid Model 2015

OSTN15 Ordnance Survey Mapping Transformation 2015

PAL Principal Archaeological Landscape

RCHME Royal Commission on the Historical Monuments of England

RICS Royal Institute Chartered Surveyors

SWARCH South West Archaeology

ACKNOWLEDGEMENTS

Staff from ENPA provided background material and facilitated access for the survey work. The author is grateful to Martin Gillard, EMP Historic Environment Officer, for commenting on the draft of this report.

LIST OF FIGURES AND IMAGE ACKNOWLEDGEMENTS

Front cover The head of the leat for Stone Farm on Hoar Moor (Hazel Riley)

Figure 1 Location map (© Crown copyright and database rights 2019 Ordnance Survey)

Figure 2 Survey area location and topography (© Crown copyright and database rights 2019 Ordnance Survey 0100031673)

Figure 3 Plan of the survey area showing site locations and numbers (1:1000)

Figure 4 EHM19001 Probable prehistoric standing stone on Hoar Moor (Im scale) (Hazel Riley)

Figure 5 EHM19002 Naturally deposited stone in peat cutting (Im scale) (Hazel Riley)

Figure 6 EHM19003 Naturally deposited stone in peat cutting (Im scale) (Hazel Riley)

Figure 7 EHM19004 Naturally deposited stone on edge of leat (1m scale) (Hazel Riley)

Figure 8 EHM19005 Naturally deposited stone (Im scale) (Hazel Riley)

Figure 9 EHM19006 Peat cutting on west side of leat (Im scale) (Hazel Riley)

Figure 10 EHM19007 Drainage ditch (Im scale) (Hazel Riley)

Figure 11 EHM19008 Drainage ditch (1m scale) (Hazel Riley)

Figure 12 EHM19009 Drainage ditch (Im scale) (Hazel Riley)

Figure 13 EHM19010 Baulk of uncut peat within the peat cutting (1m scale) (Hazel Riley)

Figure 14 EHM19010 Plan of the baulks of uncut peat within the peat cutting (1:250)

Figure 15 EHM19011 Drainage ditch (Im scale) (Hazel Riley)

Figure 16 EHM19012 Plan of the earthwork dam at the head of the leat (1:250)

Figure 17 EHM19012 The earthwork dam and the leat (Im scale) (Hazel Riley)

Figure 18 EHM19012 Eroded leat channel (Hazel Riley)

Figure 19 EHM19012 The southern end of the leat channel on Hoar Moor (Hazel Riley)

Figure 20 Probable prehistoric standing stone on the east side of the River Quarme (Hazel Riley)

Figure 21 Extract from the OS Ist edition map showing the two ponds, wheel pit and farm buildings at Stone Farm (© Crown copyright and database rights 2019 Ordnance Survey 100024878)

1.0 EXECUTIVE SUMMARY

I.I A metric survey of a leat, drainage channels and areas of disused peat cutting on Hoar Moor, NE of Exford, Exmoor, was carried out in January 2019 in advance of mire restoration by the Exmoor Mires Partnership. The survey recorded one probable prehistoric standing stone and the earthwork dam associated with the leat. The leat was shown to date from the early 20th century and supplied water for water-powered agricultural machinery at Stone Farm.

2.0 INTRODUCTION

- 2.1 This report sets out the results of a metric survey of archaeological features on the SW side of Hoar Moor, Exford, Exmoor, as part of mitigation work in advance of mire restoration work to be carried out by the EMP (Gillard 2018).
- 2.2 The survey area comprises part of a leat and a drainage ditch and their environs on the SW side of Hoar Moor, 2km to the NE of Exford, in the parish of Exford, centred at SS 859 406 (Fig 1). Hoar Moor is an area of partially reclaimed moorland at the head of the Quarme Valley, The moor rises steeply from the deeply incised river valley at 400m OD to the south, to the boundary with the open moorland of Exford Common and Rowbarrow to the north at 450m OD (Fig 2). The land has an open, south-facing aspect and is drained by the headwater stream of the River Quarme.
- 2.3 The underlying geology of Hoar Moor comprises Devonian rocks. To the north, over about 420m OD, these are sandstones, slates and siltstones of the Middle Devonian Hangman Grits; to the south are slates, siltstones and sandstones of the Avill Group and Cutcombe Slates (bgs.ac.uk).
- 2.4 The vegetation is primarily grass moorland, with some bracken on the lower slopes (Front cover). The drier grassland comprises Agrostis-Festuca (bent-fescue communities).

Ī

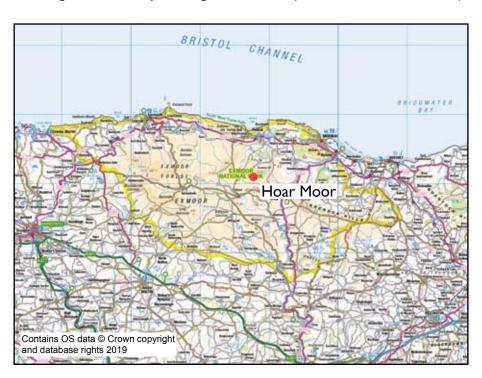


Fig | Location map

Blanket peat is accumulating on the wetter areas. These peaty flushes support *Molinia* caerulea (purple moor grass), *Juncus* (rushes) and *Sphagnum* (bog moss). The moor is grazed extensively by sheep.

2.5 Hoar Moor was enclosed by the late 19th century (OS 6" 1st edition maps Somerset 45.NE; 46.NW surveyed 1887-8, published 1888-9). A small farmstead, Holemoor, to the south of the survey area was established by the early 19th century and deserted by 1888 (Riley 2016).

2.6 Several possible prehistoric standing stones and a hut circle lie on the west side of Hoar Moor to the north of the survey area (Exmoor HER MSO6721; 6717); a possible Bronze Age round barrow lies to the SW of the survey area, on the SW side of the moor (MSO11289). Two prehistoric standing stones; part of a prehistoric field system, and a prehistoric enclosure lie on the east side of Hoar Moor (Exmoor HER MSO 6720; 6745; 6726; 9200). The field system and enclosure were identified and mapped from air photographs in the 1970s by Richard McDonnell during the CRAAGS aerial photographic transcription of Exmoor National Park (McDonnell 1978). Following this discovery, the RCHME carried out a metric survey of the prehistoric elements of the historic landscape of Hoar Moor and Codsend Moors at a scale of 1:2500, during the winter of 1987-88 (Pattison and Sainsbury 1989; descriptions in the NMR and Exmoor HER). The RCHME also considered the prehistoric standing stones of Hoar Moor as part of a survey of Exmoor's lithic monuments (Quinnell and Dunn 1992). The EH NMP project for Exmoor mapped the archaeological and historic landscape features of the whole of the National Park from air photographs (Hegarty and Toms 2009; Hegarty and Wilson-North 2014). An assessment of the historic landscape was undertaken by English Heritage in 2008 following NE's intention to increase stocking levels on the moors to improve the habitat for marsh fritillary butterflies (Riley 2009). Parts of Hoar Moor and Codsend Moors were the subject of archaeological walkover surveys by

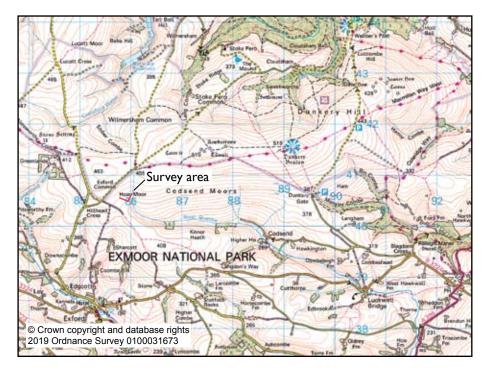


Fig 2 Survey area location and topography

SWARCH in advance of mire restoration work by the EMP in 2009 (Morris 2009). This survey identified and recorded some of the features which form the subject of this project. An archaeological walkover survey of the remaining parts of Hoar Moor and Codsend Moors was carried out in 2016 as part of research work for the EMP (Riley 2016).

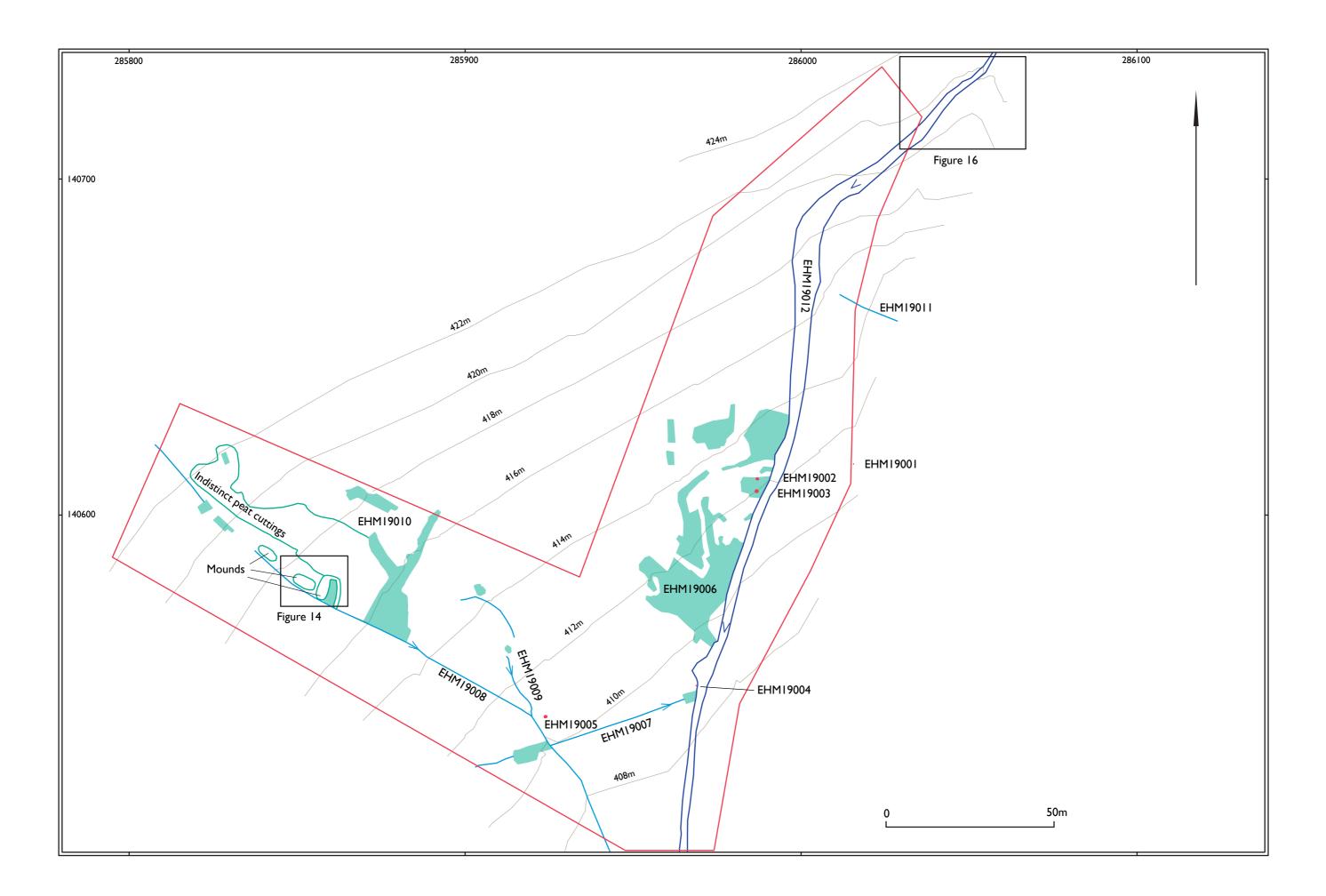
- 2.7 None of the sites in the survey area are designated heritage assets (historicengland. org.uk). Hoar Moor and Codsend Moors form part of one of Exmoor's PALs, primarily because of the complex prehistoric archaeology preserved within the post-medieval enclosures (Balmond 2015, 67).
- 2.8 Several palaeoecological studies have been carried out on Hoar Moor and Codsend Moors. Pollen diagrams with radiocarbon dates from peat on the NE side of Hoar Moor and on Codsend Moors, formed part of a major study of Exmoor's palaeoecology (Francis 1986; Francis and Slater 1990; 1992).

3.0 OBJECTIVES

3.1 The principal aim of the survey was to undertake a detailed earthwork and topographic survey of the defined area in order to identify and accurately survey and record archaeological features in the area.

4.0 METHODOLOGY

- 4.1 An analytical earthwork survey of the archaeological features contained within the survey area was carried out in January 2019. The features were surveyed at a scale of 1: 1000 using survey grade differential GPS. The resulting ETRS89 data was transformed to OSGB36 using OSTN15 and OSGM15 (www.ordnancesurvey.co.uk/gps/transformation; Greaves et al 2016). Observation times were based on those recommended by the OS and RICS in order to obtain accurate height information (OS 2010; RICS 2010).
- 4.1.1 The resulting plan is reproduced here at a scale of 1:1000 (Fig 3). A digital, GIS-compatible version at scale forms part of the survey archive.
- 4.2 In addition, two areas were recorded at larger scales. The northern end of the leat EHM19012 and part of the peat cuttings EHM19010 were surveyed at a scale of 1:250 (Figs 14 and 16).
- 4.3 A photographic survey of the archaeological features was carried out and this forms part of the project archive.
- 4.4 The project archive is held at the Exmoor HER, ENPA.
- 4.5 Each element of the archaeological remains has been assigned a number with the prefix EHM19 and these numbers are used throughout this report: EHM19001 to EHM19012. These numbers are cross-referenced to sites in the Exmoor HER and to the sites identified in the SWARCH 2009 archaeological walkover survey (Morris 2009) (Appendix 1).



5.0 RESULTS

5.1 The detailed results of the survey are set out in the Site Gazetteer (below, 5.2) and the location of each site is shown in Figure 3.

5.2 EHM19 Metric Survey Site Gazetteer

EHM19001 SWARCH #HM44 LOCATION 286015 140615 TYPE STANDING STONE PERIOD PREHISTORIC

DESCRIPTION AND INTERPRETATION A probable prehistoric standing stone lies on the west side of the Quarme Valley. The stone is an upright, rectangular block of local sandstone, 0.6m long, 0.12 thick and 0.55m high, which tapers towards the top (Fig 4). Several prehistoric standing stones lie to the NE on Hoar Moor and Codsend Moors (above, 2.7); this stone is likely to be part of that prehistoric ceremonial landscape. REFERENCES EHM19001a_E_IJAN19_HRILEY; EHM19001b_E_IJJAN19_HRILEY; EHM19001c_E_IJJAN19_HRILEY



EHM19002 SWARCH #HM16
LOCATION 285987 140610
TYPE STONE
PERIOD NATURAL FEATURE
DESCRIPTION AND
INTERPRETATION A small stone
block exposed in the edge of an
area of peat cutting on the west side
of the leat EHM19012 (Fig 5). The
stone is 0.4m long, 0.2m thick and
0.2m high and is most likely to be a
naturally deposited stone rather than
a prehistoric feature.
REFERENCES EHM19002_W_
IJAN19_HRILEY

Fig 4 (above left) EHM I 900 I Probable prehistoric standing stone on Hoar Moor (Im scale) (Hazel Riley)

Fig 5 (left) EHM I 9002 Naturally deposited stone in peat cutting (Im scale) (Hazel Riley)

EHM19003 SWARCH #HM17
LOCATION 285986 140607
TYPE STONE
PERIOD NATURAL FEATURE
DESCRIPTION AND
INTERPRETATION A small stone block
lies in an area of peat cutting on the
west side of the leat EHM19012 (Fig
6). The stone is 0.4m long, 0.15m thick
and 0.4m high and is most likely to be a
naturally deposited stone rather than a

REFERENCES EHM19003_W_ 11JAN19_HRILEY

prehistoric feature.



Fig 6 EHM I 9003 Naturally deposited stone in peat cutting (I m scale) (Hazel Riley)

EHM19004 SWARCH #HM19 LOCATION 285968 140549 TYPE STONE PERIOD NATURAL FEATURE

DESCRIPTION AND INTERPRETATION A rectangular slab of local sandstone lies on the edge of the leat EHM19012 (Fig 7). The exposed part of the stone is 0.85m long, 0.6m thick and 0.5m high; an excavation was undertaken which showed it to be a naturally deposited stone not a fallen prehistoric standing stone (below, 6.1.2). REFERENCES EHM19004_E_IIJAN19_HRILEY

EHM19005 SWARCH #HM31 LOCATION 285924 140540

TYPE STONE PERIOD NATURAL FEATURE

DESCRIPTION AND INTERPRETATION A small sandstone boulder lies close to the junction of the drains EHM19008 and EHM19009 (Fig 8). It is 0.6m long, 0.4m thick and 0.2m high and is most likely to be a naturally deposited stone.

REFERENCES EHM19005_W_IIJAN19_HRILEY

Fig 7 EHM I 9004 Naturally deposited stone on edge of leat (I m scale) (Hazel Riley)

Fig 8 EHM19005 Naturally deposited stone (1 m scale) (Hazel Riley)







Fig 9 EHM19006 Peat cutting on west side of leat (1 m scale) (Hazel Riley)

EHM19006 SWARCH #HM14; 15 LOCATION 285968 140587 TYPE PEAT CUTTING PERIOD POST-MEDIEVAL **DESCRIPTION AND** INTERPRETATION An area of welldefined peat cuttings, 75m N/S, 30m E/W and up to 0.5m deep, lies on the west of the leat EHM19012 (Fig. 9). One of the larger cuttings has a distinct, curving baulk of uncut peat running across it. The leat appears to cut through the peat cuttings. REFERENCES EHM19006a N IIJANI9 HRILEY; EHMI9006b N IIJANI9_HRILEY

EHM19007 EXMOOR HER MMO2242 LOCATION 285950 140539 TYPE DRAINAGE DITCH PERIOD POST-MEDIEVAL

DESCRIPTION AND INTERPRETATION A drainage ditch runs for some 200m SW/NE across the SW side of Hoar Moor, taking water into the leat EHM19012. The ditch is 0.9m wide and 0.6m deep and probably dates from the 19th-century enclosure of the moor (Fig 10).

REFERENCES EHM19007 SW 11JAN19 HRILEY

EHM19008 LOCATION 285902 140550 TYPE DRAINAGE DITCH PERIOD POST-MEDIEVAL Fig 10 (below) EHM19007 Drainage ditch (1m scale) (Hazel Riley) Fig 11 (below left) EHM19008 Drainage ditch (1m scale) (Hazel Riley)

DESCRIPTION AND INTERPRETATION A large drainage ditch runs for some 250m NW/SE across the SW side of Hoar Moor (Fig 11). It comprises a ditch, I m wide, 0.8m deep, with an intermittent bank, 1.3m wide, 0.6m high, on its south side. The bank is





probably a result of re-cutting noted on 1977 aerial photographs held at ENPA. At its NW end, the ditch is silted up and has been cut by small peat cuttings. It cuts through the drainage ditch EHM19007 and runs into the leat EHM19012. The ditch probably dates from the 19th-century enclosure of the moor.

REFERENCES EHM19008_SE_11JAN19_HRILEY

EHM19009 LOCATION 285916 140547

TYPE DRAINAGE DITCH PERIOD POST-MEDIEVAL

DESCRIPTION AND INTERPRETATION A drainage ditch, 20m long, 0.8m wide, 0.3m deep, runs into the drainage ditch EHM19008 (Fig 12). A curving channel to the north may be a result of attempts to drain the peat cuttings in the area.

REFERENCES EHM19009_NW_11JAN19_HRILEY

EHM19010 SWARCH #HM32-34 LOCATION 285880 140581 TYPE PEAT CUTTING

PERIOD POST-MEDIEVAL

DESCRIPTION AND INTERPRETATION An area of disused peat cutting lies to the north of the drainage ditch EHM19008. Most of the peat cuttings are silted up and indistinct; one of the more distinct peat cuttings, centred at 285880 140580, is 40m NS, up to 15m EW and some 0.75m deep. A group of irregular mounds, centred at 285850 140475 and identified during the SWARCH 2009 walkover survey, appear to be the result of uncut baulks of peat within the cuttings; the stones identified in one of them

(Morris 2009, appendix 3, #HM32) are probably the result of upcast from cleaning out the adjacent drainage ditch (Figs 13 and 14).

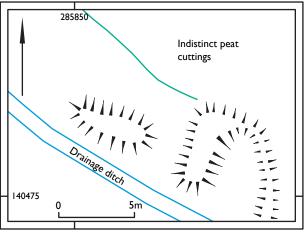
REFERENCES EHM19010_W_

11JAN19_HRILEY

Fig 12 (right) EHM19009 Drainage ditch (1m scale) (Hazel Riley) Fig 13 (below) EHM19010 Baulk in peat cutting (1m scale) (Hazel Riley) Fig 14 (below right) EHM19010 Plan of peat cutting with uncut baulks 1:250









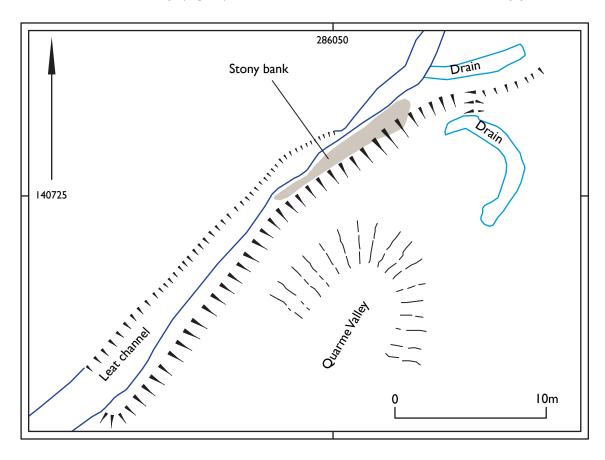
EHMI90011 SWARCH #HM43
LOCATION 286016 140662
TYPE DRAINAGE DITCH
PERIOD POST-MEDIEVAL
DESCRIPTION & INTERPRETATION A ditch,
20m long, 1.5m wide, 0.4m deep, with a bank,
1.2m wide, 0.4m high on its S side lies on the
E side of the leat EHMI9012 (Fig 15). This is
probably part of the drainage feature recorded
under MMO2244 and dates from the 19thcentury enclosure of the moor. REFERENCES
EHMI9011 E 11JAN19 HRILEY

Fig 15 EHM19011 Drainage ditch (1m scale) (Hazel Riley)

EHM190012 EXMOOR HER MMO2243 LOCATION 285994 140616 TYPE LEAT Fig 16 (bottom) EHM19012 Earthwork dam at head of leat (1:250)

PERIOD MODERN

DESCRIPTION AND INTERPRETATION A leat runs NE/SW across the SW side of Hoar Moor. It takes water from the River Quarme at 286056 140736, where a substantial earthwork bank on its south side stops water from the leat channel flowing down into the Quarme Valley (Fig 16; Front cover). The bank is composed of earth and stone and is 36m long, I.2m wide and up to Im high and the leat is a narrow channel, 2m wide and I.Im deep (Fig 17). At 286003 140689 the leat becomes a deeply eroded



9

channel, up to 8m wide and 2.5-3m deep (Fig 18). South of the intersection of the leat and the drainage ditch EHM19007, at 285970 140545, the leat channel is far less eroded and is up to 8m wide, 2.5-3m deep. South of the survey area, the leat is silted up and can be seen as a rush-filled channel on the SW side of the moor (Fig 19). The leat crosses Prescott Down where it can be seen on modern mapping, then runs along the side of Stone Lane into Stone Farm. The leat is not shown on the OS 1st or 2nd edition 6" maps (Somerset 45.NE 1888; 1902), but can be seen on the RAF 1946 aerial photographs, suggesting that it was dug during the early 20th century.

REFERENCES EHM19012a_SW_IIJAN19_HRILEY; EHM19012b_SW_IIJAN19_HRILEY; EHM19012c_NE_IIJAN19_HRILEY; EHM19012d_SW_IIJAN19_HRILEY; EHM19012e_SW_IIJAN19_HRILEY; EHM19012f_S_IIJAN19_HRILEY; EHM19012g_SIIJAN19_HRILEY; EHM19012h_SIIJAN19_HRILEY; EHM19012g_SIIJAN19_HRILEY; EHM19012h_SIIJAN19_HRILEY; EHM19012h_SIIJAN19_HRILEY

6.0 DISCUSSION

6.1 One of the stones identified by the SWARCH 2009 survey could be prehistoric standing stones. The upright stone EHM19001 on the west side of the River Quarme is probably a prehistoric standing stone, given its form and location (Fig 20). The large rectangular stone slab EHM19004, on the edge of the leat, was thought to be either a fallen prehistoric standing stone or a naturally deposited stone; an excavation in advance of mires restoration showed that it is a naturally deposited stone (below, 6.1.2). Given the comments made in 1987 about the large amounts of naturally

Fig 17 (right) EHM19012 Earthwork dam and leat (1m scale) (Hazel Riley)

Fig 18 (below right) EHM19012 Eroded leat channel (Hazel Riley)

, "









IO EHMI9

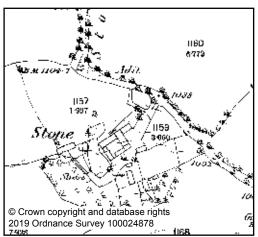
occurring stone uncovered in and beneath peat during drainage work on the north side of Hoar Moor (Exmoor HER MSO6721), it seems reasonable to suggest that the other stones are naturally deposited stones and not part of the prehistoric landscape.

6.1.1 The upright stone EHM19001 is probably a prehistoric standing stone and measures should be put in place to safeguard it prior to any restoration works.

6.1.2 The stone slab on the edge of the leat was excavated by SWARCH on 5th March 2019 in advance of mire restoration works. It was shown to be a naturally deposited stone, roughly triangular in shape, with a base well over 1m long and 1m wide (Martin Gillard, EMP Historic Environment Officer, pers comm).

6.2 The two areas of disused turbaries are typical of domestic peat cutting on Exmoor. The peat cuttings appear to be cut by the leat EHM19012 and probably date from the post-medieval period: a number of leases for property and land in neighbouring Cutcombe refer to rights of turbary on Dunkery and Codsend Moors in the 16th and 17th centuries (Riley 2014, 9-10).

6.3 The leat EHM19012 and associated features are important aspects of the 19th-and early 20th-century agricultural landscape of Exmoor. The OS 1st edition 6" map (Somerset 45.NE 1888) shows a water channel to the SE of the leat EHM19012, which appears to be the original leat, dug to supply water to Stone Farm, some 1.5 km to the



south. The present house at Stone was built in the mid- to late 18th century for Sir Thomas Acland and is clearly shown as a country house of some importance on Day and Masters' County Map of Somerset (1792, Sheet I) (HE List entry 1345753). The tithe map (Exford, 1840) shows three groups of farm buildings behind the house, grouped around a large pond. The 1st edition 25" map (Somerset 46.5, surveyed 1888, published 1889)



Fig 20 (left) Probable prehistoric standing stone on east side of River Quarme (Hazel Riley)

Fig 21 (above left) Extract from OS 1st edition map (1888) showing the two ponds, wheel pit and farm buildings at Stone Farm.

II EHMI9

shows a second pond to the NE and a range of farm buildings grouped around a yard between the two ponds. A leat is shown emerging from the higher pond and running towards what appears to be a wheel pit (Fig 21). In 1977 Derek Warren from the Somerset Industrial Archaeological Society noted an overshot water wheel, outside running gear and the remains of a wheel pit and bearings at Stone Farm (Exmoor HER MSO I 1278). Documentary evidence shows that 1851 Stone Farm was the centre of a 500 acre estate; by 1881 this had increased to 800 acres (www.victoriacountyhistory.ac.uk VCH Explore Stone Farm, Exford). The post-medieval history of Stone Farm suggests that the original leat on Hoar Moor was constructed in the mid- 19th century to supply water to a farm water wheel to power a range of agricultural buildings associated with the running of a large mixed farm. The 19th-century leat was superseded by the leat channel EHM19012 which took water off the Quarme some 150m to the north.

6.3.1 Water power was introduced to many West Country farms in the mid- 19th century (Wade Martins 2002). The importance of water power on Exmoor's upland farms in the 19th century is reflected by the Knights' undertakings on the neighbouring former Royal Forest where many miles of leats were dug for this purpose, and can be seen in the survival of specialist buildings and machinery at farms such as Cloggs (Riley 2017; Jones 2000).

7.0 REFERENCES

Balmond, F 2015 Principal Archaeological Landscapes on Moorland in Exmoor National Park: Assessment and Condition Survey

Francis, P D 1986 'A record of vegetational and land use change from upland peat deposits on Exmoor. Part 1: Background and fieldwork' *Proc Somer Archaeol Natur Hist Soc* 130, 1-9

Francis, P D and Slater, D S 1990 'A record of vegetational and land use change from upland peat deposits on Exmoor. Part 2: Hoar Moor' *Proc Somer Archaeol Natur Hist Soc* 134. 1-25

Francis, P D and Slater, D S 1992 'A record of vegetational and land use change from upland peat deposits on Exmoor. Part 3: Codsend Moors' *Proc Somer Archaeol Natur Hist Soc* 136, 9-28

Greaves, M, Downie, P and Fitzpatrick, K 2016 'OSGM15 and OSTN15: new transformations for UK and Ireland,' *Geometics World* 24 (5), 18-21

Gillard, M 2018 Brief for Metric Survey on Hoar Moor, Exford EHM19

Jones, BV 2000 Cloggs Farm, Withypool, Somerset

Hegarty, C and Toms, K 2009 Exmoor National Park NMP Management and Survey Report

Hegarty, C and Wilson-North, R 2014 The Archaeology of Hill Farming on Exmoor

I2 EHMI9

McDonnell, R 1978 'CRAAGS Air Survey' in M A Aston and B J Murless (eds) Somerset Archaeology 1977 Proc Somer Archaeol Natur Hist Soc 122, 118

Morris, B 2009 Exmoor National Park Authority Mire Restoration Project. Archaeological Walkover Surveys Results of Archaeological Walkover Surveys at Hommer/Challacombe Moor, Acklands Squallacombe Moor, Hoar Moor and Codsend Moor and Hydrological Survey at Codsend Moor SWARCH Report 090417

Ordnance Survey 2010 A guide to coordinate systems in Great Britain. An introduction to mapping coordinate systems and the use of GPS datasets with Ordnance Survey mapping

Pattison, P and Sainsbury, I S 1989 'Prehistoric earthworks on Codsend and Hoar Moors, Somerset,' in M Bowden, D Mackay and P Topping (eds) From Cornwall to Caithness: Some Aspects of British Field Archaeology BAR 209, 79-81

Quinnell, NV and Dunn, C | D 1992 Lithic Monuments within the Exmoor National Park

Riley, H 2009 Hoar Moor and Codsend Moors, Exford and Cutcombe, Somerset Exmoor National Park. Historic Landscape Analysis

Riley, H 2014 Turf Cutting on Exmoor: An Archaeological and Historical Study

Riley, H 2016 Archaeological Walkover Survey: Hoar Moor and Codsend Moors (Sites 1 & 4) Exmoor Mires Partnership HCM16

Riley, H 2017 Agricultural Reclamation at Larkbarrow Farm, Exmoor EMP ELB17

Royal Institution Chartered Surveyors 2010 Guidelines for the use of GNSS in land surveying and mapping 2nd edn

Wade Martins, S 2002 The English Model Farm. Building the Agricultural Ideal, 1700-1914

8.0 APPENDICES

- 8.1 EHM19 Summary of heritage assets
- 8.2 EHM19 Photographic archive index
- 8.3 EHM19 Project brief

I3 EHMI9

8.1 EHM19 Summar	y of Heritage Assets							
EHM19 reference	HER reference	SWARCH 2009 ref	Eastings	Northings	Site type	Date	Description	
EHM19001		#HM44	286015	140615	STANDING STONE	PREHISTORIC	Probable standing stone at head of the Quarme Valley	
EHM19002		#HM16	285987	140610	STONE		Stone exposed in peat cutting; natural feature	
EHM19003		#HM17	285986	140607	STONE		Stone exposed in peat cutting; natural feature	
EHM19004		#HM19	285968	140549	STONE		Stone slab on the edge of leat; natural feature	
EHM19005		#HM31	285924	140540	STONE		Stone on the edge of drain; natural feature	
EHM19006		#HM14; 15	285968	140587	PEAT CUTTING	POST-MEDIEVAL	Disused turbaries on the west side of the leat on Hoar Moor	
EHM19007	MM02242		285950	140539	DRAINAGE DITCH	POST-MEDIEVAL	Drainage ditch on SW side of Hoar Moor	
EHM19008			285902	140550	DRAINAGE DITCH	POST-MEDIEVAL	Drainage ditch on SW side of Hoar Moor	
EHM19009			285916	140547	DRAINAGE DITCH	POST-MEDIEVAL	Silted drainage ditch on SW side of Hoar Moor	
EHM19010		#HM32-34	285880	140581	PEAT CUTTING	POST-MEDIEVAL	Disused turbaries on north side of drainage ditch on Hoar Moor	
EHM19011	MM02244		286016	140662	DRAINAGE DITCH	POST-MEDIEVAL	Part of drainage system on Hoar Moor	
EHM19012	MM02243		285994	140616	LEAT	MODERN	Leat on the SW side of Hoar Moor	

8.2 EHM19 Photographic archive index					
Photo reference number	Date taken	Survey reference	HER reference	Description	Scale
EHM19001a_E_11JAN19_HRILEY	11/01/2019	EHM19001		Probable prehistoric standing stone on W side of R Quarme	
EHM19001b_E_11JAN19_HRILEY	11/01/2019	EHM19001		West face of stone	1m
EHM19001c_E_11JAN19_HRILEY	11/01/2019	EHM19001		East face of stone	1m
EHM19002_W_11JAN19_HRILEY	11/01/2019	EHM19002		Naturally deposited stone in edge of peat cutting	1m
EHM19003_W_11JAN19_HRILEY	11/01/2019	EHM19003		Naturally deposited stone in peat cutting	1m
EHM19004_E_11JAN19_HRILEY	11/01/2019	EHM19004		Naturally deposited stone on edge of leat	1m
EHM19005_W_11JAN19_HRILEY	11/01/2019	EHM19005		Naturally deposited stone	1m
EHM19006a_N_11JAN19_HRILEY	11/01/2019	EHM19006		Peat cutting on edge of leat	1m
EHM19006b_N_11JAN19_HRILEY	11/01/2019	EHM19006		Disused turbary on the west side of leat on Hoar Moor	
EHM19007_SW_11JAN19_HRILEY	11/01/2019	EHM19007	MMO2242	Drainage ditch on SW side of Hoar Moor	1m
EHM19008_SE_11JAN19_HRILEY	11/01/2019	EHM19008		Large drainage ditch on SW side of Hoar Moor	1m
EHM19009_NW_11JAN19_HRILEY	11/01/2019	EHM19009		Drainage ditch on SW side of Hoar Moor	1m
EHM19010_W_11JAN19_HRILEY	11/01/2019	EHM19010		Disused turbary north of drainage ditch on Hoar Moor	1m
EHM19011_E_11JAN19_HRILEY	11/01/2019	EHM19011	MMO2244	Drainage ditch west of River Quarme	1m
EHM19012a_SW_11JAN19_HRILEY	11/01/2019	EHM19012	MMO2243	Head of the leat at the River Quarme	
EHM19012b_SW_11JAN19_HRILEY	11/01/2019	EHM19012	MMO2243	Earthwork dam at the head of the leat	
EHM19012c_NE_11JAN19_HRILEY	11/01/2019	EHM19012	MMO2243	Detail of the earthwork dam	1m
EHM19012d_SW_11JAN19_HRILEY	11/01/2019	EHM19012	MMO2243	Detail of the earthwork dam	1m
EHM19012e_SW_11JAN19_HRILEY	11/01/2019	EHM19012	MM02243	Detail of the earthwork dam	1m
EHM19012f_S_11JAN19_HRILEY	11/01/2019	EHM19012	MM02243	Eroded leat channel	
EHM19012g_S_11JAN19_HRILEY	11/01/2019	EHM19012	MMO2243	Southern end of the leat on Hoar Moor	
EHM19012h S 11JAN19 HRILEY	11/01/2019	EHM19012	MMO2243	Southern end of the leat on Hoar Moor	

BRIEF FOR METRIC SURVEY ON HOAR MOOR, EXFORD (EHM19)

1.0- Aim

- 1.1: This brief has been prepared by the Historic Environment Officer (HEO) for the Exmoor Mires Project (EMP) on behalf of Exmoor National Park Authority (ENPA).
- 1.2: The principal aim of the work described by this document is to undertake a detailed earthwork and topographic survey covering approximately 2ha in an area around SS85964056 on Hoar Moor, Exford (Figure 1). The objective of this work is to identify and accurately survey and record archaeological features in the area; the vast majority of these are turf cuttings.

2.0: Background

- 2.1: The landscape of Hoar Moor is dominated by rough pasture which was enclosed in the 19th century. There was also prehistoric activity in the area field systems and related features lying to the east (MSO9193) and possible stone setting to the west (MSO6721). Down the centre of the site runs a substantial, eroding leat. This is the western branch of MMO2243; cartographic and aerial photographic analysis has shown it to date from the first half to the twentieth century. The edges of this feature are eroding heavily and it is proposed to reprofile them to stop this process. This feature runs through an area of peat cuttings that will be impacted by the reprofiling. A drainage ditch to the west also runs through an area of cuttings and is proposed for mires restoration works. The peat cuttings have not previously been recorded so it is necessary to make an accurate, measured record prior to any potential impact from mires restoration works or ongoing erosion.
- 2.2: The moorland terrain of Exmoor is often difficult to traverse which, combined with the region's unpredictable weather, can often result in unforeseen delays to work in this environment. It is thus advisable to account for this when planning work and quotes for the work described here must allow an appropriate contingency which will be released at the discretion of the HEO.

3.0: Methodology

- 3.1: The site will be described using the code: CHM19. All reports, communications, digital files and other material must contain this code. Surveyed features will be assigned a unique reference number prefixed by the site code and suffixed by a sequential number 1 (i.e. CHM19(1), CHM19(2) etc).
- 3.2: The HEO will be available at all stages to advice on requirements.
- 3.3: Personnel undertaking the survey should remain consistent for its duration and quotes for the work must include short CVs demonstrating expertise and experience in survey of upland environments.
- 3.4: Fieldwork should be completed by 11th January 2019 and a start date arranged with the HEO so that other land users can be informed.
- 3.5: To ensure consistency and enable comparison with other surveys, a standard suite of data will be captured for each feature surveyed. This is described in Appendix 1 of this brief.

- 3.6: A plan of the survey area (see map below) should be produced at 1:2500, although individual features should also be surveyed at a different scale if the surveyor and HEO think appropriate. Survey of types of features should be as follows:
 - Drainage ditches may be illustrated as lines.
 - The top edges of the leat MMO2243 may be illustrated as lines no further detail is necessary.
 - Stones may be recorded as points or as a simple polygon if appropriate to their size.
 - Turf cuttings can be recorded as outlines although any particular surviving details should be recorded or noted as appropriate. Cuttings that extend partially beyond the survey area on the accompanying map should be fully surveyed.
 - Significant features lying within the survey area notably the dam at the NE end of the leat (extending from SS8603740714 to SS8606540736) and the mounds within turf cuttings (around SS8585840579) should be recorded with hachures.
- 3.7: A contour survey should also be included on the plan.
- 3.8: Survey results will be tied to the National Grid with an accuracy of at least \pm 0.1m.
- 3.9: A photographic record of significant surveyed features should be captured. Each image should contain an appropriate scale. Additionally, representative photographs of the survey area and landscape setting should also be taken.
- 3.10: Relevant data derived from the ENPA HER will be supplied before commencement of this work.
- 3.11: The project schedule is summarised in Table 1:

Task	Date
Complete fieldwork	11 th January 2019
Submit draft report	1 st February 2019
HEO return draft	8 th February 2019
Submit Final report	15 th February 2019

Table 1: Project schedule.

4.0: Deliverables

- 4.1: A draft digital copy, in MS Word format, of an appropriately illustrated report on the work should be provided to the HEO by 1^{st} February 2019.
- 4.2: The report will contain:
 - 1. The 1:2500 earthwork plan of the survey area which will include the contour survey (3.7).
 - 2. A graphic interpretation of the surveyed features.
 - 3. A description of each surveyed feature, accompanied by a photograph and, where appropriate, a larger scale plan of the feature.

- 4. Conclusions and interpretation concerning the surveyed area.
- 4.3: The HEO will return the draft report by 8th February 2019, with appropriate comments.
- 4.4: Following any necessary revisions, an unbound hard copy, as well as 3 bound hard copies of the final report will be delivered to the HEO, in addition to digital versions in PDF and Word formats, by 15th February 2019.
- 4.5: The digital photographic archive will be delivered on a CD included in the back of the final report. The file name of each image should be in the following format:

Site&Feature Identifier_ImageOrientation_Date_ContractorName

4.6: The archaeological consultant will complete an online OASIS form describing the survey, including a digital copy of the report before completion of this contract. The report will also contain the appropriate OASIS number.

5.0: Health and Safety at Work

- 5.1: The contractors shall at all times comply with the requirements of the Health and Safety at Work, Etc., Act 1974, and any other Acts, Regulations or Orders pertaining to the health and safety of employees. All personnel will conduct themselves in an appropriate manner in accordance with relevant IfA guidelines (http://www.archaeologists.net/codes/ifa).
- 5.2: ENPA's Historic Environment Manager shall be empowered to suspend the work or provision of the Service or part thereof in the event of non-compliance by the contractors with this condition or with its legal duties in health and safety matters. The contractors shall not resume provision of the Service or such part until the Authorised Officer is satisfied that the non-compliance has been rectified.
- 5.3: A full risk assessment will be submitted to the HEO and agreed by him in advance of any fieldwork. Any variation to working practices set out in the risk assessment must be agreed by the HEO.
- 5.4: It is emphasised that conditions on Exmoor's moorlands can be unpredictable and extreme. Accordingly contractors are expected to be appropriately equipped and have access to a mobile telephone with reasonable coverage in the region if lone working or employ multiple personnel to undertake the work. It will also be advantageous for surveyors to be experienced in working under upland and/or wetland conditions.

6.0: Insurance

6.1: The contractor shall satisfy ENPA that he (the contractor) during the whole period of this Contract has an insurance policy with an Insurance Company of good repute covering himself and all persons deriving right from him against claims by the owners, his officers and employees and by third parties. This is in respect of any claim for damages caused by accident or negligence arising out of this Contract, it being understood that the amount of the insurance shall not in any way limit the liability of the contractors to the owners. The contractors shall on request produce for inspection by ENPA the policy and premium receipts.

7.0: Termination

7.1: In the event of a breach of any of the conditions of this Agreement, ENPA may terminate the Agreement on seven days notice in writing and may by other means carry out or complete the work specified herein, and recover the cost or any additional cost thereof from the contractors.

8.0 Disputes

8.1: Any dispute arising between ENPA and the contractor shall be referred to a single arbitrator to be appointed by agreement, or failing agreement to be appointed by the President of the Royal Institution of Chartered Surveyors, the award of such arbitration to be final and binding upon both parties.

Appendix 1

Data Capture

Location: representative 10 figure National Grid reference

Type: follow EH Thesaurus Period: follow EH guidelines

Description and interpretation: to include dimensions and heights of feature

References: list file names of all survey photographs

