

METRIC SURVEY OF A BURNT MOUND, BLACK HILL,  
WOODBURY, EAST DEVON  
Devon HER MDV78064  
PROJECT REPORT

By Hazel Riley



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OASIS PROJECT NO 344403

## **ABBREVIATIONS**

AONB Area of Outstanding Natural Beauty

ETRS89 European Terrestrial Reference System 1989

GPS Global Positioning System

HER Historic Environment Record

OS Ordnance Survey

OSGB36 Ordnance Survey Great Britain 1936 (National Grid)

OSGM15 Ordnance Survey Geoid Model 2015

OSTN15 Ordnance Survey Mapping Transformation 2015

RICS Royal Institute Chartered Surveyors

## **ADMINISTRATIVE INFORMATION**

Devon HER number: MDV78064

County: Devon

District: East Devon

Parish: Woodbury

NGR: SY 02502 85510

## **ACKNOWLEDGEMENTS**

The landowners facilitated access for the survey work.

## LIST OF FIGURES AND IMAGE ACKNOWLEDGEMENTS

Front cover The burnt mound lies in an area of clear felled coniferous plantation (Hazel Riley)

Figure 1 Location map (Contains OS data © Crown copyright and database right 2019)

Figure 2 Location of the burnt mound (Contains OS data © Crown copyright and database right 2019)

Figure 3 The burnt mound on Black Hill 1:200 scale

Figure 4 Profile NW/SE across the mound 1:200 scale

Figure 5 The northern side of the mound where forestry operations have encroached onto the mound (1m scale) (Hazel Riley)

Figure 6 Detail of the damage to the northern side of the mound (1m scale) (Hazel Riley)

Figure 7 Carter's 1938-9 excavation trench cuts through the mound (Hazel Riley)

Figure 8 Tilley's 2010 excavation trench on the west side of Carter's trench (1m scale) (Hazel Riley)

Figure 9 Fire-cracked pebbles exposed by forestry operations on the western edge of the mound (1m scale)

Figure 10 The burnt mound from the east (Hazel Riley)



Fig 1 Location map



## 1.0 EXECUTIVE SUMMARY

1.1 A metric survey of a Bronze Age burnt mound on Black Hill, SE of Woodbury, was undertaken in order to record its location and morphology. The mound was partially excavated in 1938-9 by George Carter and radiocarbon dates from material recovered from that excavation date it to the Early-Middle Bronze Age.

## 2.0 INTRODUCTION

2.1 This report sets out the results of a large scale metric survey of the remains of a burnt mound on the west side of Black Hill, commissioned by the Devon County Archaeologist. The survey was required in order to accurately locate the monument and to provide a record of the morphology of the structure and to record recent damage by forestry operations. The mound lies in a coniferous plantation and the site and its environs have been recently cleared of trees.

2.2 The burnt mound lies at the SW side of the East Devon AONB, on the western side of Black Hill, SE of Woodbury, at an altitude of 138m OD and at NGR SY 02502 8510 (Figs 1 and 2). Black Hill lies at the SW edge of a narrow ridge of high ground, occupied by heathlands, running roughly N/S from Ottery St Mary to Budleigh Salterton.

2.3 The underlying geology of the survey area comprises Triassic mudstones of the Littleham Mudstone Formation, with Triassic conglomerates of the Chester Formation (part of the East Devon Pebblebeds) to the east ([bgs.ac.uk](http://bgs.ac.uk)). The burnt mound lies close to the boundary of these two geological formations.

2.4 The burnt mound lies within plantations managed by the Clinton Devon Estates and the area has been clear felled and re-planted (Front cover). Two recently cut ditches to the west and east of the mound serve to drain the area.

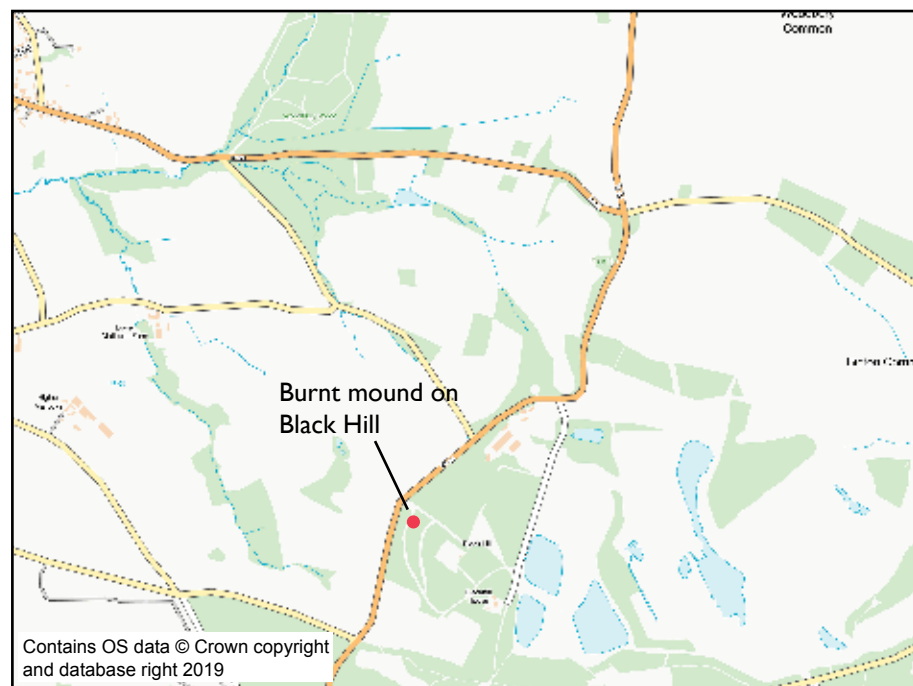


Fig 2 Location of the burnt mound

2.5 The OS map of 1801 (bl.ac.uk Ottery St Mary) shows that Black Hill was open common at the beginning of the 19th century; by 1839 the land was a plantation – Water Plantation – owned by Lord Rolle (Woodbury tithe award 1839 and map 1841). The OS 1<sup>st</sup> edition map shows the area in coniferous woodland. A spring is marked some 47m to the south of the burnt mound, close to a track (OS 1<sup>st</sup> edition map 25” Devon 93.6, surveyed 1888, published 1890).

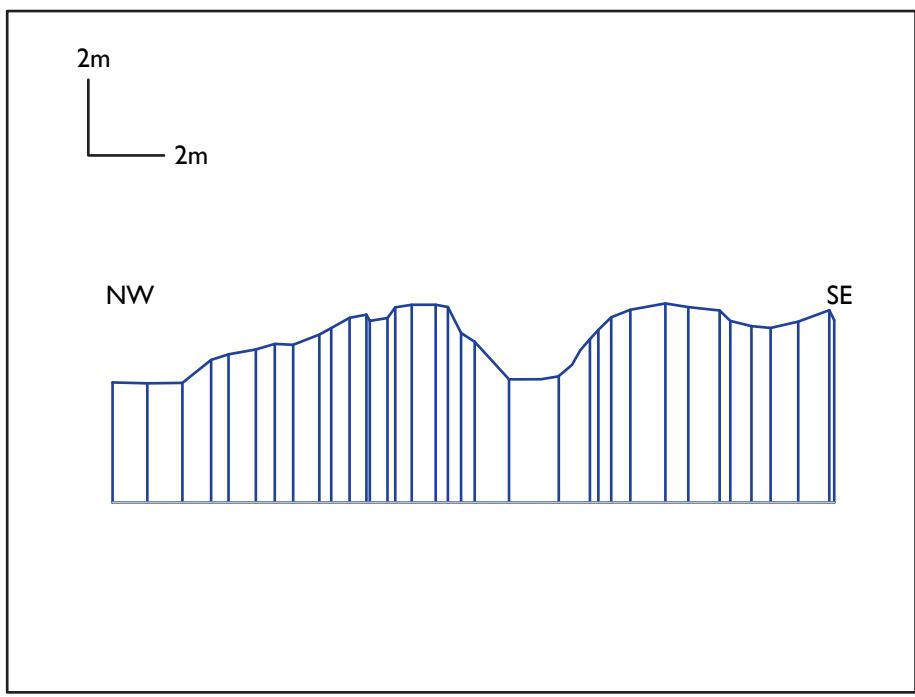
2.6 George Carter excavated a section N/S through much of the centre of the burnt mound in 1938-9; the results of this excavation were not published but the manuscript notes and photographs were used by Chris Tilley in his work on the landscape and archaeology of the East Devon heathlands (Tilley 2009; 2017). Part of this work included obtaining radiocarbon dates from oak stakes recovered from Carter’s excavations, placing the burnt mound in the Early to Middle Bronze Age (Tilley 2009). The site was considered as part of the archaeological survey of the East Devon AONB (Exeter Archaeology 2003-4, Site 2638). Chris Tilley excavated a small trench to the side of Carter’s long section on the top of the mound and reconsidered the 1938-9 sections during the course of work carried out in 2010 (Tilley 2017, 190-214).

### 3.0 OBJECTIVES

3.1 The principal objectives of the survey were to record the location, morphology and current condition of the burnt mound.

### 4.0 METHODOLOGY

4.1 A Level 3 analytical earthwork survey of the monument was undertaken at a scale of 1:200 on 8<sup>th</sup> and 11<sup>th</sup> February 2019 (Fig 3). The survey was carried out using survey grade differential GPS. The resulting ETRS89 data was transformed to OSGB36 using OSTN15 and OSGM15 ([www.ordnancesurvey.co.uk/gps/transformation](http://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 heighting information (OS 2010; RICS 2010). A profile was surveyed using GPS E/W across the cairn (Fig 4).

*Fig 4 Profile NW/SE across the burnt mound 1:200 scale*

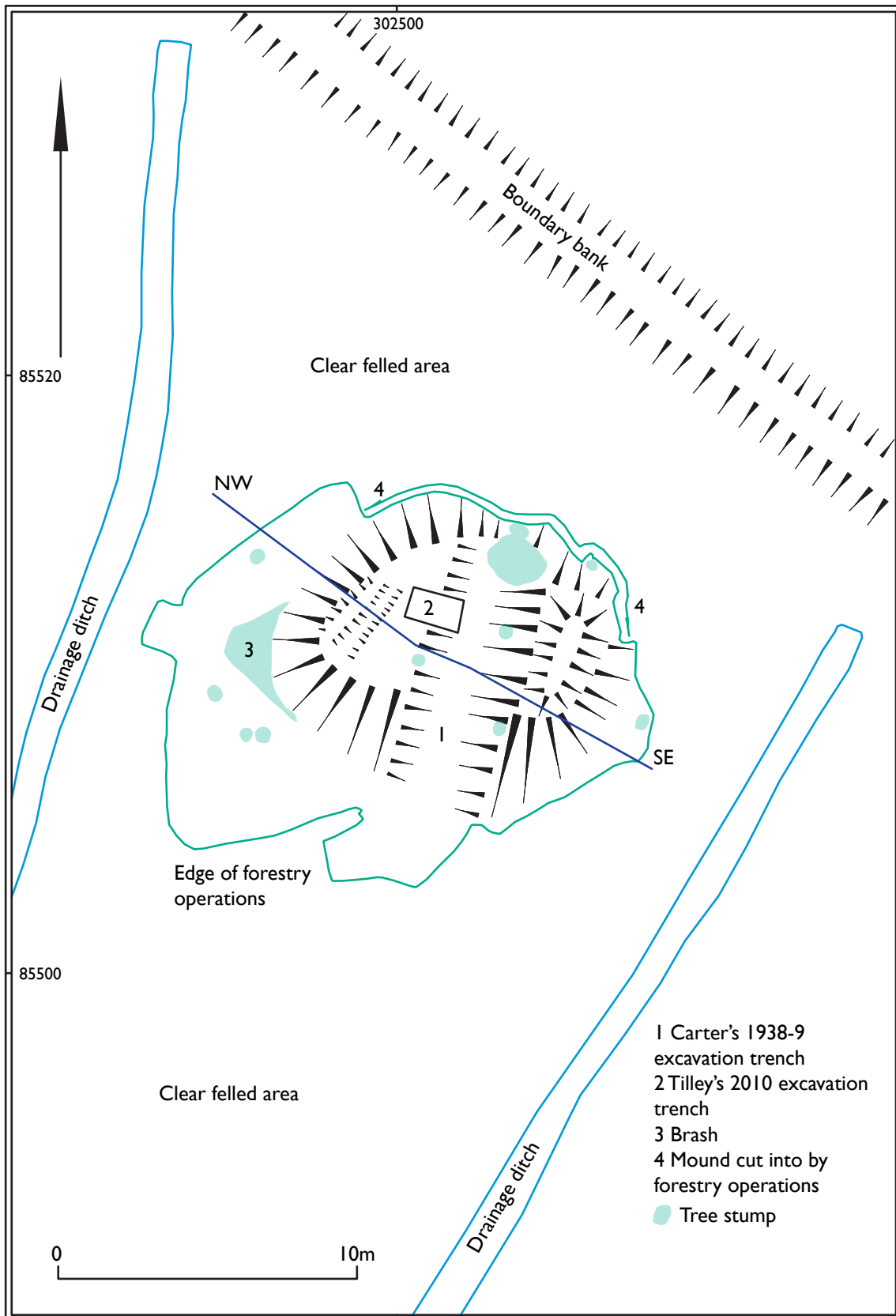


Fig 3 The burnt mound on Black Hill 1:200 scale

4.2 Photographs of representative areas of the monument were taken and form part of the project archive (Appendix 8.1).

4.3 Survey constraints included

4.3.1 Ground conditions: brash has been placed across the SW part of the monument

4.3.2 Satellite availability was compromised by the steep escarpment of Black Hill to the east and the trees on the boundary immediately to the north of the mound.

4.4 The survey archive has been deposited with the Devon HER.

## 5.0 RESULTS

5.1 The site comprises an oval mound, measuring 11m NW/SE, 9.8m NE/SW and some 1m high. Part of the northern side of the mound has been cut into by forestry operations (Figs 5 and 6).

5.2 A rectangular trench, 8m N/S, 3.8m E/W and up to 2m deep effectively bisects the mound (Fig 7). This is the remains of the large section cut through the mound by George Carter in 1938 and 1939 (Tilley 2009). On the western edge of this is a small hollow, marking the site of the excavation carried out in 2010 (Fig 8) (Tilley 2017).



*Fig 5 (above left) Encroachment on the north side of the mound by forestry operations (1m scale) (Hazel Riley)*

*Fig 6 (above) Detail of damage on north side of mound (1m scale) (Hazel Riley)*



*Fig 7 (left) Carter's 1938-9 excavation trench cuts through the burnt mound (Hazel Riley)*



5.3 The western part of the part of the mound is flat-topped with a small linear hollow on its edge where the remains of fire-cracked pebbles can be seen (Fig 9). This may be the result of damage by forestry operations. The eastern side of the mound has a gently rounded profile and this may be the result of spoil from Carter's 1938-9 excavations.

5.4 The measured profile (Fig 4) suggests a slight ditch or hollow on the east side of the mound. Carter's section drawn in 1938-9 shows a distinct ditch to the east of the burnt mound, but ground conditions now make it impossible to discern such a feature (Tilley 2009, fig 3).

## 6.0 DISCUSSION AND RECOMMENDATIONS

6.1 The burnt mound on Black Hill is part of a small but growing body of evidence for such sites in the south west peninsula. A burnt mound dating from the Early Bronze Age was excavated during archaeological work along a pipeline in West Penwith, Cornwall in 2006 (Jones and Quinnell 2006); excavations in advance of quarrying at Burlescombe and Clyst Honiton in Devon recorded burnt mounds dating from the Middle Bronze Age (Gent 2007; Hart *et al* 2014) and a probable burnt mound was identified and excavated in the cliff face at Seatown in Dorset in 2015 ([ntsouthwest.co.uk](http://ntsouthwest.co.uk)). Two extant burnt mounds in Somerset have been recently discovered during fieldwork on Exmoor. At Spooner's Allotment, near Simonsbath, two mounds of fire-cracked stone linked by a bank, with overall dimensions of 16m x 6m and up to 1m high, lie close to the confluence of two tributary streams of the River Barle; a third probable burnt mound, 4m in diameter and up to 1m high, lies at the confluence of the streams (Riley 2014). A burnt mound was discovered on Brendon Common on the valley floor of Hoccombe Combe in 2009 (Wilson-North 2011). This is directly comparable in its morphology to the burnt mound on Black Hill: a kidney-shaped mound, 10m x 8m and 1-1.8m high (Wilson-North 2011, fig 3).



Fig 8 (right) Tilley's 2010 excavation trench on the west side of Carter's trench (1m scale) (Hazel Riley)



Fig 9 (above right) Fire-cracked pebbles exposed by forestry operations on the west edge of the mound (1m scale) (Hazel Riley)

6.1.1 There remains considerable potential for the discovery of extant, unrecorded burnt mounds or the re-interpretation of known cairns and barrows on the East Devon heathlands.

6.2 The burnt mound is vulnerable to damage by forestry operations and should be clearly marked prior to any works (Fig 10). Brash should be removed from the mound and measures should be put in place to stop further dumping of material on the mound.

6.3 The source of water associated with the burnt mound was the spring line at the base of the steep escarpment of Black Hill. A spring near the burnt mound was known as 'Jacob's Well' by the early 20<sup>th</sup> century. Recent forestry operations have obscured the site of Jacob's Well; the area is still very wet and poorly drained (Front cover). Carter records the small bog beside the burnt mound as still being used as a wishing well by locals in 1938 at the time of his excavations. In an unpublished note he wrote that 'people came to drop offerings in the then hole in the swamp about two or three feet from the aboriginal well' (Tilley 2009, 33). Carter also recorded Jacob's Well for a survey of holy and notable wells in Devon as: 'A hole in the bog below the escarpment of Black Hill on Woodbury Common. Still a wishing well in 1938. A domestic water supply is taken from a nearby spring' (Brown 1959, 37).

6.4 A geophysical survey of the mound and its immediate environs could address questions such as the existence of a ditch.



*Fig 10 The burnt mound from the east (Hazel Riley)*

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## **8.0 APPENDIX**

8.1 Photographic archive index

8.1 Burnt mound on Black Hill Photographic archive index				
Photo reference number	Date taken	HER reference	Description	Scale
BH01_S_15FEB19_HRILEY	15/02/2019	MDV78064	The burnt mound and forestry clearance work	
BH02_W_15FEB19_HRILEY	15/02/2019	MDV78064	The burnt mound from the east	
BH03_S_15FEB19_HRILEY	15/02/2019	MDV78064	Forestry operations encroached on N side of burnt mound	1m
BH04_S_15FEB19_HRILEY	15/02/2019	MDV78064	Damage to N side of mound	1m
BH05_N_15FEB19_HRILEY	15/02/2019	MDV78064	Carter's 1938-9 excavation trench N/S across mound	
BH06_N_15FEB19_HRILEY	15/02/2019	MDV78064	Detail of Carter's excavation trench	1m
BH07_W_15FEB19_HRILEY	15/02/2019	MDV78064	Tilley's 2010 excavation trench	1m
BH08_E_15FEB19_HRILEY	15/02/2019	MDV78064	Fire-cracked pebbles on W side of mound	1m



