

# **Archaeological Services**

Archaeological Walkover Survey and LiDAR study, Hillsborough Promontory Fort, Ilfracombe, Devon NGR: SS 5323 4776

**Matt Beamish** 



ULAS Report No 2011-121. ©2011

# Archaeological Walkover Survey and LiDAR study, Hillsborough Promontory Fort,

# Ilfracombe, Devon

# NGR: SS 5323 4776

#### **Matt Beamish**

For: North Devon AONB

Checked by Signed: Date: 6 September 2011 Name: R. J. Buckley

**University of Leicester** 

Archaeological Services University Rd., Leicester, LE1 7RH Tel: (0116) 2522848 Fax: (0116) 2522614

ULAS Report Number 2011-121 ©2011 Museum Accession NDDMS 2011.32

# CONTENTS

1. Summary	1
2. Background	1
3. Historical Background	1
The Earthworks:	
The Cist:	
4. Methods	
5. Results	
6. LiDAR	22
6.1 Analysis and interpretation of LiDAR data	22
6.2 Analysis	
6.3 Interpretations of LiDAR data	
7. Discussion	33
7. Recommendations	
8. Archive	41
9. Acknowledgements	41
10. Bibliography	41
Appendix 1. NMR List Entry for Hillsborough	43
Appendix 2. Evidence for the Cist John Moore	
Appendix 3. OASIS Information	47

# FIGURES

Figure 1: Showing location of HERs over current Ordnance Survey mapping. Only labelled reconvere considered in this study	
Figure 2: 2210, Path through lower ramparts, from south west	8
Figure 3: 2210: Path between upper ramparts from south west	
Figure 4: 2210. Eastern tail of upper western rampart	
Figure 5: 2210. View south east toward Ilfracombe from path through upper ramparts	
Figure 6: View east along line of ridge and boundary to north of upper rampart	
Figure 7: Berm between ramparts, facing east, from 253140/147670 (approx)	
Figure 8: 12535. Between the ramparts and facing north broadly in the same location as the previous	
identified cist, a stone slab on the ground surface, and possible evidence of slumping in the upp	
rampart (obscured by bracken background central).	
Figure 9: Disturbance, possibly evidence of slumping in the upper rampart	
Figure 10: 12538, Natural mound from south. This is now discounted and attributed as a nature	
feature	
Figure 11: 56279; Gun Battery from south. The cast iron tracks are at 3.90m centres, although this h	
been widened by cracking in the concrete on which they are set. A low retaining wall lies on the rig	
hand side. The structure is eroding over the cliff edge.	
Figure 12 HER 54970: Shelter from west	
Figure 13: 62893; Limekiln from north	14
Figure 14: From east: Limekiln 62893 foreground left, runners of gun battery 56279 foreground rig	,ht,
and flagstaff (HER 75644) in distance	
Figure 15: 63451, Linear Earthwork from north	
Figure 16: 75628: Shelter from north	
Figure 17: 75630: Interior of roofless shelter from north	
Figure 18: 75631: Structure from west	
Figure 19: 75634, External wall of small building from east.	
Figure 20: 75646; Gateposts from south	17
Figure 21: Location of new sites with 1 <sup>st</sup> edition Ordnance Survey (1890)	
Figure 22: Detail of 1934 3rd Revision showing a structure at Observation 1, and a possible structure	
Observation 3	
Figure 23: Observation 1: Base of structure from south. Probable site of tea shop.	
Figure 24: Observation 2, retaining wall from west on eastern edge of coastal path. The wall is	
shaped in plan with a return on the southern side.	20
Figure 25: Observation 3, path edging from east, to north of structure built at western end of upp	
rampart.	
Figure 26: Observation 4: Sign Post from south. Peak of Hillsborough in background.	
Figure 27: Observation 5; wrought iron railings guarding vantage point from south	
Figure 28: Area of filtered LiDAR acquired for project (lighter tone) and area analysed (darker tone)	
Figure 29: Conventional hillshade of DTM.	
Figure 30: Sky-View combined hillshade	
Figure 31: Detail of Sky-View combined hillshade	
Figure 32: Ground slopes, showing the undulating terrain within Hillsborough	
Figure 33: Detail of Sky-View model with points of interpretation.	29
Figure 34: Plan showing Scheduled Monument boundary cutting across ramparts in south-east corr	
$\Gamma_{i}^{i} = 25$ D $\downarrow$ 1 2 $J_{i}^{i} = 1$ $i$ $\downarrow$ 1 $i$ $\downarrow$ 2 $J_{i}^{i} = 1$	
Figure 35: Pseudo 3 dimensional image using Sky-View shade model from south	
Figure 36: Pseudo 3 dimensional image using Sky-View shade model from east	
Figure 37: Pseudo 3 dimensional image using Sky-View shade model from north	
Figure 38: Pseudo 3 dimensional image using Sky-View shade model from west	
Figure 39: Hillsborough from south-east. Satellite photo combined with DTM data and manipulated	
pseudo 3 dimensional image Figure 40: Hillsborough from north-wast. Satellite photo combined with DTM data and manipulated	
pseudo 3 dimensional image	
poudo 5 unicipional iniage	55

Archaeological Walkover Survey and LiDAR study, Hillsborough Promontory Fort, Ilfracombe, Devon

### 1. Summary

An archaeological walkover survey was undertaken over Hillsborough Promontory Fort, Ilfracombe, North Devon. The locations of Historic Environment Records were visited and surviving remains rapidly assessed and photographed. Several new sites of interest were recorded. A ground survey was produced from filtered LiDAR data which was acquired for the project. The data sets have been combined to increase knowledge of the site regarding the surviving ramparts and indicate areas that might contain further archaeological information.

# 2. Background

North Devon Area of Outstanding Natural Beauty commissioned a Management Plan for Hillsborough Promontory Fort, to assist the ongoing management of the site in relation to heritage, ecology and public enjoyment. This archaeological study has been compiled to inform the Management Plan (Fyfe 2011).

# 3. Historical Background

#### The Earthworks:

Prominent banks running for at least 265m across the width of the Hillsborough Promontory had been recognised as archaeological by the early 19th Century and were represented schematically on the Ordnance Survey 1 inch to the mile map of Devon (Mudge 1809). The Devon HER cites H. Woolcombe who visited the site in 1841 and described the double bank of the promontory fort. The banks were later referred to, ambiguously, as 'doubtful remains of British earthworks' (Slade-King 1879, 162). The first edition Ordnance Survey mapping of 1890 included detailed representation of the features, and showed two ramparts, mostly parallel, with inturned entrances in the west, and areas of quarrying to the south-east of each entrance. To the north of the inner rampart, the line of a hedge boundary (itself constructed on a substantial natural ridge) is also shown. Also represented on this map, was a Tumulus at the apex of the hill. This later earthwork has since been discounted as a natural outcrop.

The site attained gradual recognition with various descriptions following Ministry of Works and Ordnance Survey Archaeology Division visits to the site. The site was included in a paper describing multivallate forts in Exmoor and North Devon (Whybrow 1967) and a Gazetteer of Devon hill-forts (Fox 1996). The site was scheduled in 1978 as a bivallate promontory fort formed with ramparts 12 feet apart pierced by inturned entrances. The current online NMR listing (August 2011) contains no description (Appendix 1). The current Scheduled Boundary excludes the southern extent of the earthworks (Figure 34).

#### The Cist:

A stone chamber, probably a cist, was found in the upper rampart in 1937. Although the specifics of what was found and when, is somewhat obscure, documentary evidence held at Ilfracombe Museum (as reported and cited by John Moore (<u>http://www.johnhmoore.co.uk/hele/hillsborough.htm</u> last accessed 24/8/2011) is more detailed than that information held on Devon HER. John Moore's research into the cist is included as Appendix 2 with his permission.

Workmen digging a trench in 1937 to limit the spread of a fire discovered a small chamber in the side of the upper rampart, and a photograph attributed to the curator of Ilfracombe Museum clearly shows a lined chamber. The interpretation of the feature as a cist was provisionally confirmed by the Ordnance Survey in November 1937, but the efforts of the Ilfracombe Museum curator (Mr M Palmer) to get the site fenced off and protected, were in vain. At some stage, bones were reported to have been found nearby. It is reported that the feature was infilled before any record could be made although an Ordnance Survey field visit 16 years later in October 1953 described a cist, 'facing south and cut into the side of an artificial scarp of an Iron Age promontory fort is a cavity 0.4 metres high, surrounded by drystone masonry and covered with a lintel 0.3 metres thick. The cavity is 0.7 metres wide and the recess 1.4 metres. The walling appears to be partly quarried out and partly drystone. The flooring, which is horizontal, is filled with loose earth and stone chippings.'

The story is then confused by a visit by Aileen Fox in spring 1958, when the supposed cist was discounted as an animal burrow, similar to a number of others in the vicinity. This description is surely not that of the feature photographed and must either have been of an animal hole in a different location, or have followed infilling and obscuring of any clear archaeological signs. Several undated documents report that the cist was filled in at some stage, and this may have been between 1953 and 1958.

# 4. Methods

The Hillsborough site was visited on 7th and 8<sup>th</sup> July 2011. Equipped with plans of the sites overlain with HER site locations, the location of each site was visited, rapidly assessed and photographed. The locations of new observations were annotated on scale plans using offsets from known points.

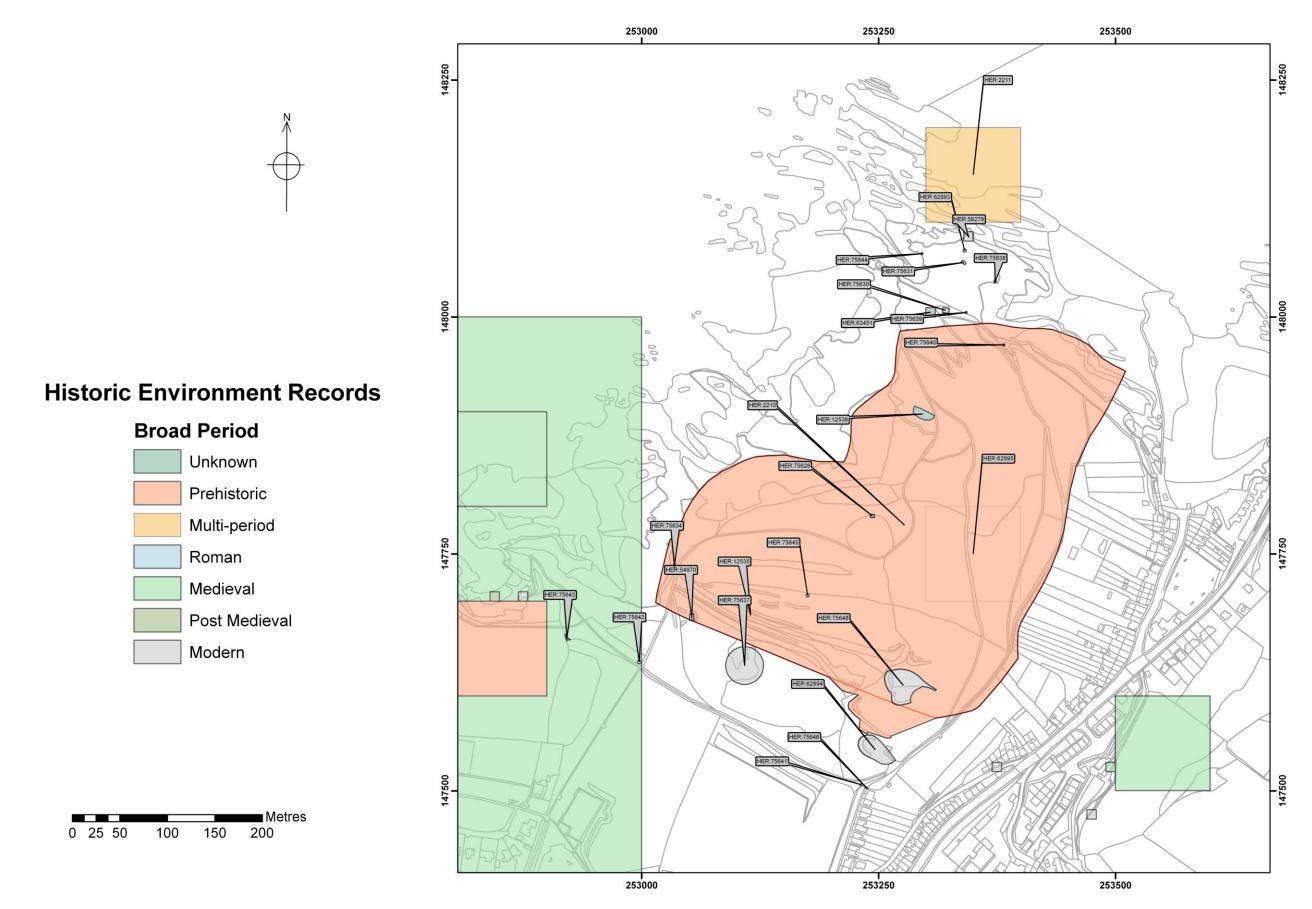


Figure 1: Showing location of HERs over current Ordnance Survey mapping. Only labelled records were considered in this study.

Mapping © Crown Copyright. All rights reserved. Licence number AL 100021929

# 5. Results

HER Sites visited as part of Walkover Survey in UID order

UID	Monument Name	Туре	Broad Period	NGR	Form	Photo	Comments
2210	Hillsborough Promontory Fort, Ilfracombe	PROMONTORY FORT	Prehistoric	SS5326347774	Earthwork		Despite vegetation clearance in 2010, there has been much bracken and scrub regeneration over the ramparts. Although the banks across most of their lengths remain visible, and are impressive both on immediate approach and when viewed from Ilfracombe up to 1km to the west, elements are less impressive when viewed in close proximity. The inturned entrances are now barely perceptible beneath the bracken cover.
2211	Beacon Point, Hillsborough	BEACON	Multi-period	SS533-481-	Place name Evidence		1ha area not possible to visit
12535	Possible Cist at Hillsborough Promontory Fort	CIST	Unknown	SS53114768	Documentary Evidence (Photographic)	,	Not relocated. Flat stone on ground surface visible in same broad area photographed. Possible evidence of subsidence in southern face of upper rampart in near vicinity. It was not possible to locate this with any precision when

UID	Monument Name	Туре	Broad Period	NGR	Form	Photo	Comments
							identified. The area of subsidence has been reported to English Heritage Monuments Inspector (D. Edgecombe pers comm.).
62895	Flint Tools from Hillsborough Promontory Fort	FLINT	Prehistoric	SS533-477-	Find		Unprovenanced
54970	Shelter in Hillsborough Promontory Fort	BUILDING	Modern	SS5305347684	Extant Building		Shelter in broadly good state of repair. Vegetation encroaching from rear and sides.
75628	Shelter in Hillsborough Promontory Fort	BUILDING	Modern	SS5324447790	Extant Building		In good state of repair. Orientation of the shelter has been determined by virtue of the rock cut interior as it faces the hillside to the north, and not out to sea.
75630	Shelter in Hillsborough Promontory Fort	BUILDING	Modern	SS5332148007	Ruined Building		Overgrown and unroofed.
75631	Structure near Gun Battery in Hillsborough Promontory Fort	STRUCTURE	Modern	SS5334048058	Structure		Overgrown but in fair condition
75634	Small Building in Hillsborough Promontory Fort	BUILDING	Modern	SS5303447738	Extant Building		Only rear of structure viewed, as too overgrown to enter
75637	Tree Clump near Hillsborough Promontory Fort	TREE CLUMP	Modern	SS5310947632	Documentary Ev (Cartographic)	vidence	Not visited
75638	Guide Post in Hillsborough Promontory Fort	SIGNPOST	Modern	SS5337348038		vidence	Not visited
75639	Guide Post in Hillsborough Promontory Fort	SIGNPOST	Modern	SS5334248005		vidence	Not visited
75640	Guide Post in Hillsborough Promontory Fort	SIGNPOST	Modern	SS5338347971		vidence	Not visited
75641	Guide Post at Hillsborough Promontory Fort	SIGNPOST	Modern	SS5323247506		vidence	Not visited
75642	Guide Post at Hillsborough	SIGNPOST	Modern	SS5299847636		vidence	Not visited

UID	Monument Name	Туре	Broad Period	NGR	Form	Photo	Comments
	Promontory Fort				(Cartographic)		
75643	Urinal at Hillsborough Promontory Fort	PUBLIC CONVENIENCE	Modern	SS5292247662	Documentary Ev (Cartographic)	vidence	Not visited
75644	Flagstaff at Hillsborough Promontory Fort	FLAGPOLE	Modern	SS5329648067	Documentary Ev (Cartographic)	vidence	Photographed
75645	Flagstaff in Hillsborough Promontory Fort	FLAGPOLE	Modern	SS5317547706	Documentary Ev (Cartographic)	vidence	Not visited
75646	Gateposts at entrance to Hillsborough	GATE PIER	Modern	SS5323847502	Structure		Photographed
62893	Limekiln at Hillsborough	LIME KILN	Unknown	SS5334148070	Structure		Photographed
62894	Quarry at Hillsborough Promontory Fort	QUARRY	Modern	SS5324847544	(Cartographic)	vidence	Too overgrown to photograph
75648	Quarry at Hillsborough Promontory Fort	~	Modern	SS5328447609	Documentary Ev (Cartographic)	vidence	Too overgrown to photograph
63451	Linear Earthwork at Hillsborough Promontory Fort	LINEAR FEATURE	Unknown	SS5330548005	Earthwork		<ul> <li>Photographed. Much overgrown although this earth bank remains quite clear on the north side of structure 75630. A bank is visible in the LiDAR data in this area, extending for 25m and then for a further 8m following a break of some 3m.</li> <li>A possible bank feature is also visible to the east of the structure, on the same alignment as the 63451 but offset slightly to the north by some 2m. This later feature shares much of its position with a boundary on the current Ordnance Survey mapping, and it may be modern.</li> </ul>

UID	Monument Name	Туре	Broad	NGR	Form	Photo	Comments
			Period				
56279	Gun Battery at Beacon Point,	BATTERY	Modern	SS5334548085	Documentary Evidence		Photographed. Concentric cast
	Hillsborough				(Photographic)		iron rails on edge of eroding
							cliff.
12538	Possible Mound in Hillsborough	MOUND	Unknown	SS5329847898	Documentary Evidence		Photographed. Originally
	Promontory Fort				(Cartographic)		identified on Ordnance Survey
							mapping of 1890 as a tumuli,
							this feature has been discounted
							as of natural origin, and no
							discrete mound is visible. The
							area is much overgrown with
							blackthorn.

## Photographs 11/7/2011 in UID order.

### 2210: Promontory Fort



Figure 2: 2210, Path through lower ramparts, from south west.



Figure 3: 2210: Path between upper ramparts from south west.



Figure 4: 2210. Eastern tail of upper western rampart



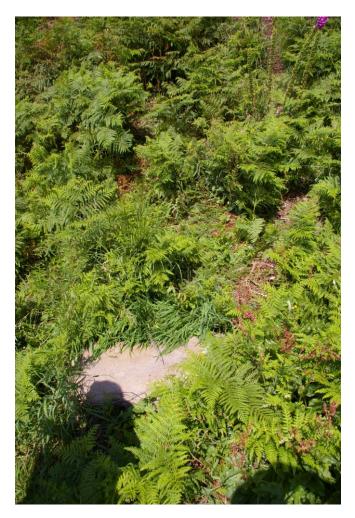
Figure 5: 2210. View south east toward Ilfracombe from path through upper ramparts



Figure 6: View east along line of ridge and boundary to north of upper rampart



Figure 7: Berm between ramparts, facing east, from 253140/147670 (approx)



12535: Possible Cist at Hillsborough Promontory Fort

Figure 8: 12535. Between the ramparts and facing north broadly in the same location as the previously identified cist, a stone slab on the ground surface, and possible evidence of slumping in the upper rampart (obscured by bracken background central).



Figure 9: Disturbance, possibly evidence of slumping in the upper rampart

Surface remains of a stone slab and possible evidence of slumping in the southern edge of the upper rampart may indicate the presence of a construction within the upper rampart – feasibly the disturbed and infilled cist. Further more detailed survey within this location would be needed to permit the drawing of any firmer conclusions. These features were not located with any precision.

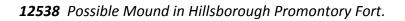




Figure 10: 12538, Natural mound from south. *This is now discounted and attributed as a natural feature*.



**56279** Gun Battery at Beacon Point, Hillsborough

Figure 11: 56279; Gun Battery from south. The cast iron tracks are at 3.90m centres, although this has been widened by cracking in the concrete on which they are set. A low retaining wall lies on the right hand side. The structure is eroding over the cliff edge.



**54970** Shelter in Hillsborough Promontory Fort

Figure 12 HER 54970: Shelter from west

62893 Limekiln at Hillsborough



Figure 13: 62893; Limekiln from north.



Figure 14: From east: Limekiln 62893 foreground left, runners of gun battery 56279 foreground right, and flagstaff (HER 75644) in distance

63451 Linear Earthwork at Hillsborough Promontory Fort



Figure 15: 63451, Linear Earthwork from north

**75628** Shelter in Hillsborough Promontory Fort



Figure 16: 75628: Shelter from north

75630 Shelter in Hillsborough Promontory Fort



Figure 17: 75630: Interior of roofless shelter from north

**75631** Structure near Gun Battery in Hillsborough Promontory Fort



Figure 18: 75631: Structure from west



75634 Small Building in Hillsborough Promontory Fort

Figure 19: 75634, External wall of small building from east.

75646 Gateposts at entrance to Hillsborough



Figure 20: 75646; Gateposts from south

#### Further sites

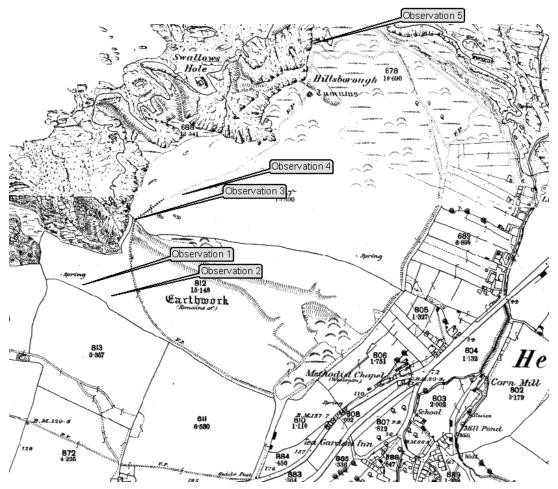


Figure 21: Location of new sites with 1<sup>st</sup> edition Ordnance Survey (1890)

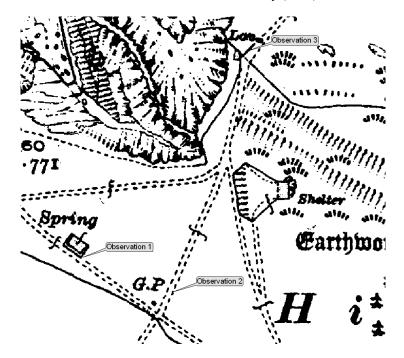


Figure 22: Detail of 1934 3rd Revision showing a structure at Observation 1, and a possible structure at Observation 3

#### Observations of new sites

Observation 1. 252969/147654: Immediately adjacent to the path descending toward Raparee Cove, some 37m west of the intersection of this path with the coastal path, the floor of a rectangular building survives. A structure is represented here on the 1932 1:2500 3rd Revision but is not present on the 1:2500 1st edition of 1904. This is interpreted as the remains of a tea shop which features in some of the historic photographs from the site. Wooden benches facing the view toward Ilfracombe harbour have been added. The area is now much overgrown.

Observation 2. 253006/147640: A low stone wall consisting of two courses of vertically pitched stones capped with a thin layer of concrete was exposed on the eastern side of the coastal path 11m north of its intersection with the path to Rapparee Cove. The wall was 'L' shaped, 1.2m long, 1.2m deep and 0.30m high. The face of the wall was curved as if on the northern side of an entrance to a building or an enclosed area.

Observation 3. 253038/147741: Path edging to 4m north of 75634. Vertically pitched stones similar in style to those noted at 1 (above). The 3rd revision 1932 map shows a small rectangular building (?) on the western edge of the coast path in this area.

Observation 4. 253100/147775 Wooden sign post 3.5m west of coastal path. Remains of sign indicator visible on northeast face only. "To the top"?? Moulding visible around post near top.

Observation 5. 253274/147974 A 6m length of wrought iron railings at 82mm centres skirts around a viewing point area on the north-west side of the promontory. Concrete posts at 1.9m centres, a safety rail of steel tubing and chicken wire infill have been later added.

#### Observation 1: 252969/147654: Structure



Figure 23: Observation 1: Base of structure from south. Probable site of tea shop.

### Observation 2: 53006/147640: low stone wall



Figure 24: Observation 2, retaining wall from west on eastern edge of coastal path. The wall is L shaped in plan with a return on the southern side.

Observation 3: 253038/147741: Path edging



Figure 25: Observation 3, path edging from east, to north of structure built at western end of upper rampart.

## Observation 4: 253100/147775 Wooden sign post



Figure 26: Observation 4: Sign Post from south. Peak of Hillsborough in background.

Observation5: 253274/147974 wrought iron railings



Figure 27: Observation 5; wrought iron railings guarding vantage point from south

# 6. LiDAR

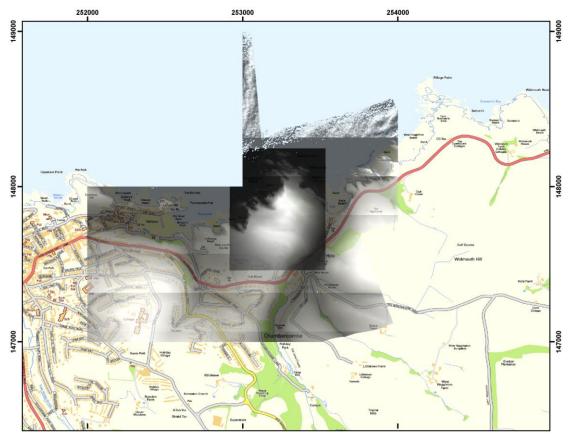
#### 6.1 Analysis and interpretation of LiDAR data

LiDAR data was purchased from the Environment Agency National Centre for Environmental Data and Surveillance in Bath. LiDAR stands for Light Detection and Ranging and is an airborne mapping technique, which uses a laser to measure the distance between the aircraft and the ground. This technique results in the production of a cost-effective terrain map that contains considerable topographic detail.

Both unfiltered data and filtered data were acquired. The unfiltered data includes vegetation and tree cover, and although including much information was considered of less use in this instance. The filtered data has had all vegetation, hedges, trees and buildings automatically removed by the use of algorithms to remove features that have created high slope gradients. The result of this filtering is a ground model (DTM), which was used as the basis for the analysis.

One tile of filtered data was supplied, and a smaller area of data was chosen for analysis as represented in Figure 28. The tile was flown in March 2009. The recording of LiDAR data in winter months has advantage in there being less vegetation.

The data, supplied as ASCII Grid files, consisted of a grid of cells at 1m intervals with elevation values. The analysis of the data with geo-spatial software enables the rapid integration of this data with other sources of information, and the ability to assign variable colour ranges to height values, and to calculate contours, slopes, aspects and shadows.



LIDAR © Environment Agency 2011. Mapping based upon Ordnance Survey data © Crown copyright and database right 2011

Figure 28: Area of filtered LiDAR acquired for project (lighter tone) and area analysed (darker tone)

### 6.2 Analysis

The filtered data was processed and analysed using Esri ArcMap 9.3. This analysis, following English Heritage guidelines (Crutchley 2010) included:

1. Colour plotting of elevation values with a view to extracting as much information as possible from the data in the following way (including 'Classified' and 'Stretched' plotting). These plots are termed Digital Surface Models (DTMs).

2. Creation of conventional hillshade plots at various azimuth and altitude settings.

3. Creation of *Sky-View* plots (after Zakšek, K., et al 2011). Sky-View modelling was undertaken which develops an image on the basis of the amount of sky visible from each data point, and effectively combines several hillshades in one analysis (<u>http://iaps.zrc-sazu.si/?q=en/svf</u> last accessed 03/10/2011).

4. Creation of pseudo 3-dimensional models for interpretation purposes..

#### Colour plotting:

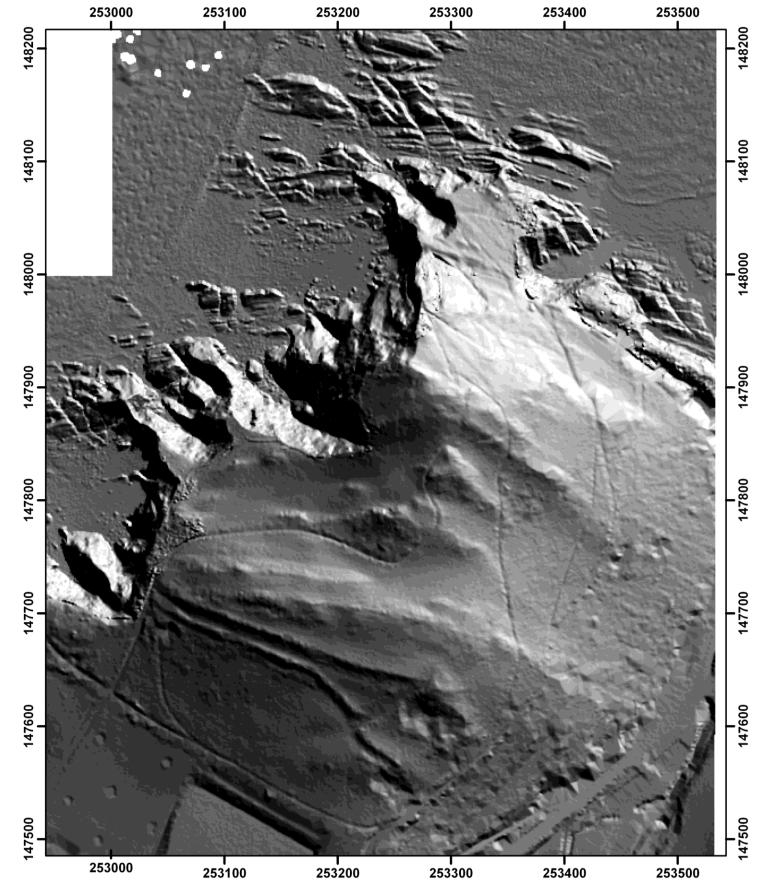
In this instance, due to the large vertical differences in the topography, colour plotting had little use in delineating known earthworks or exposing the topography. No colour plots are reproduced here.

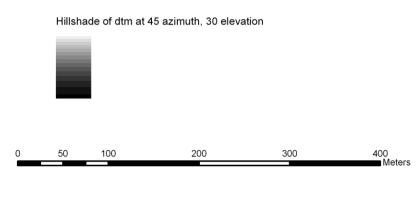
#### Hill shading and Sky-View Modelling

The Hillshade and Sky-View plots enable concise representations of topographic elements. The conventional hillshades show a group of similarly aligned features very well, but potentially fails to expose others which are at different alignments. Sky-View plots combine multiple hillshades, and represent all positive and negative features in one plot.



Ν





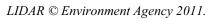
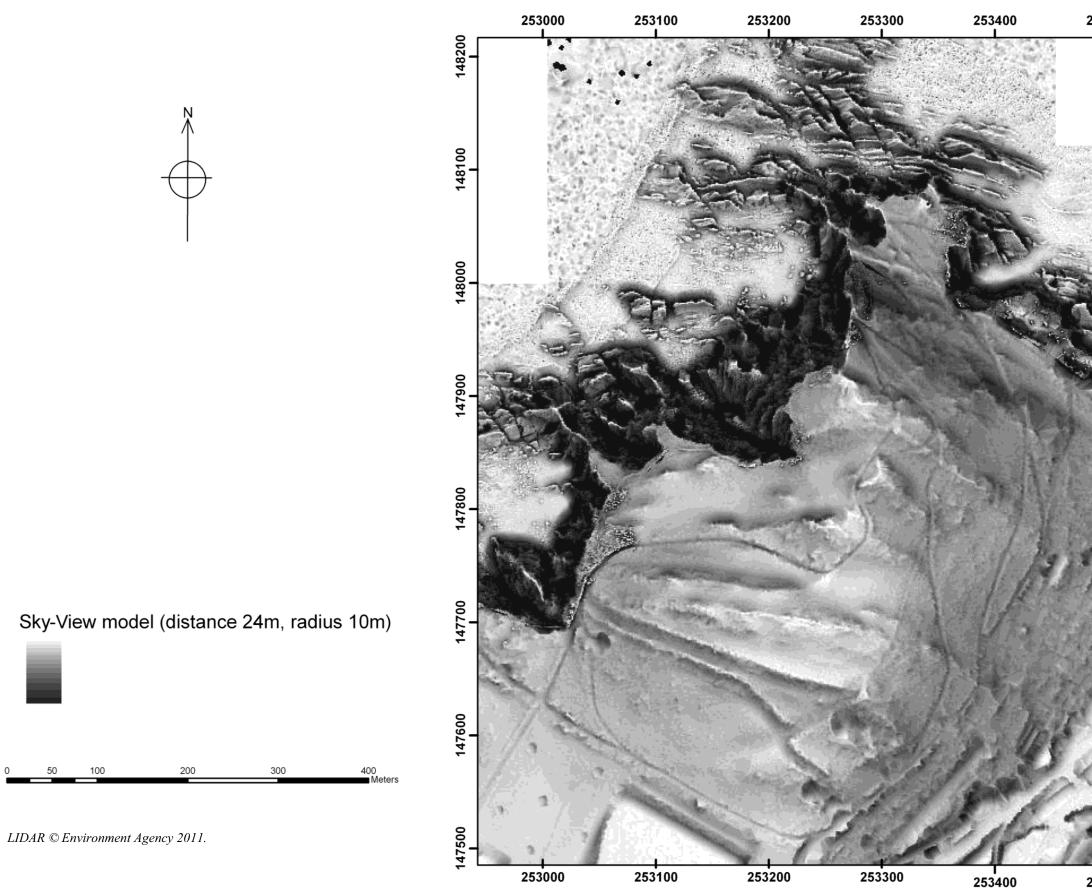
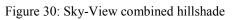
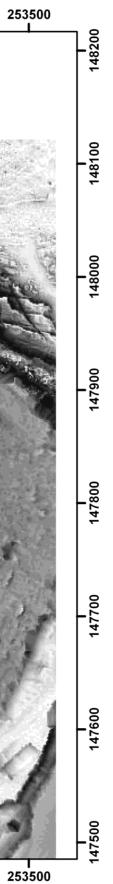
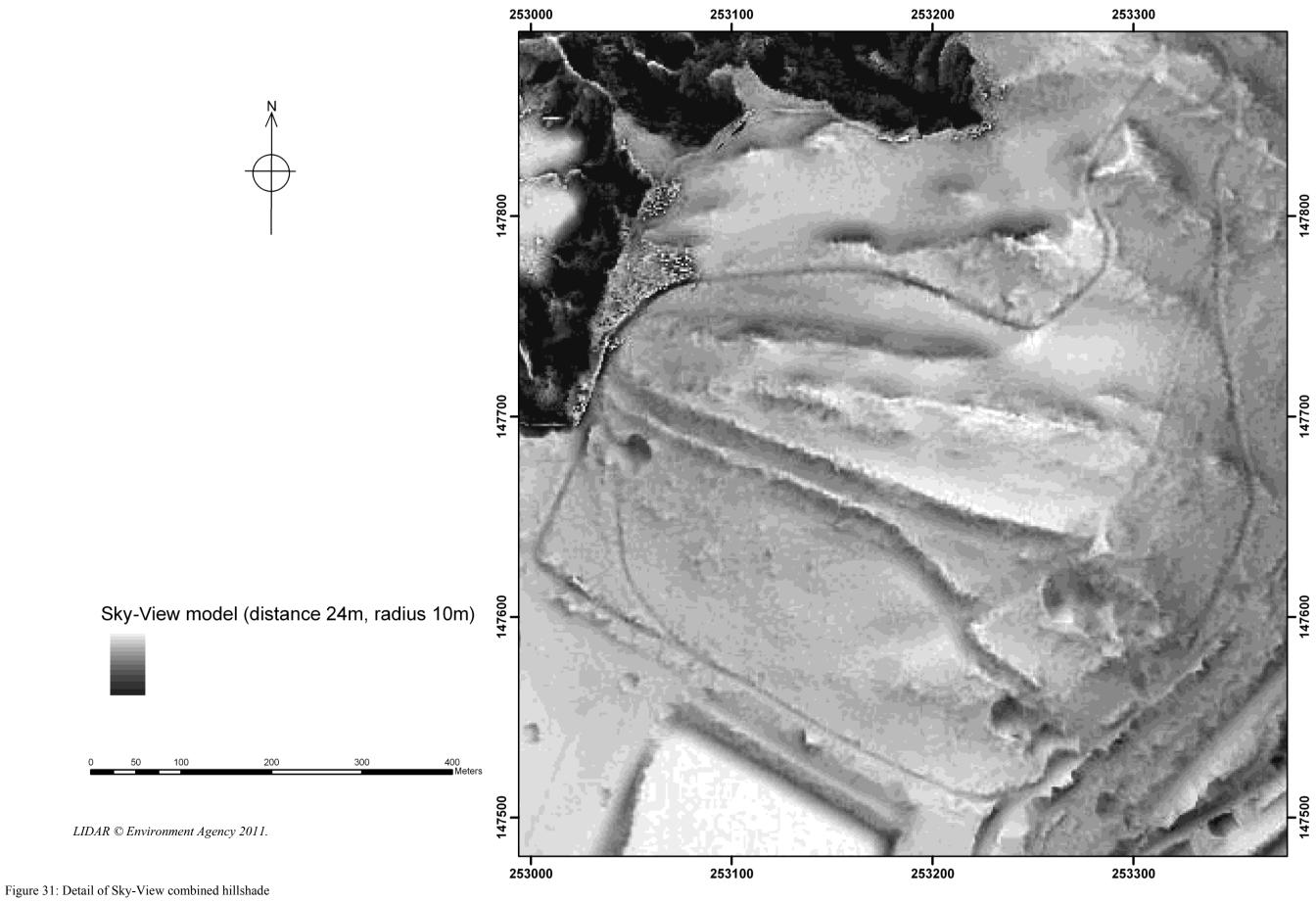


Figure 29: Conventional hillshade of DTM.

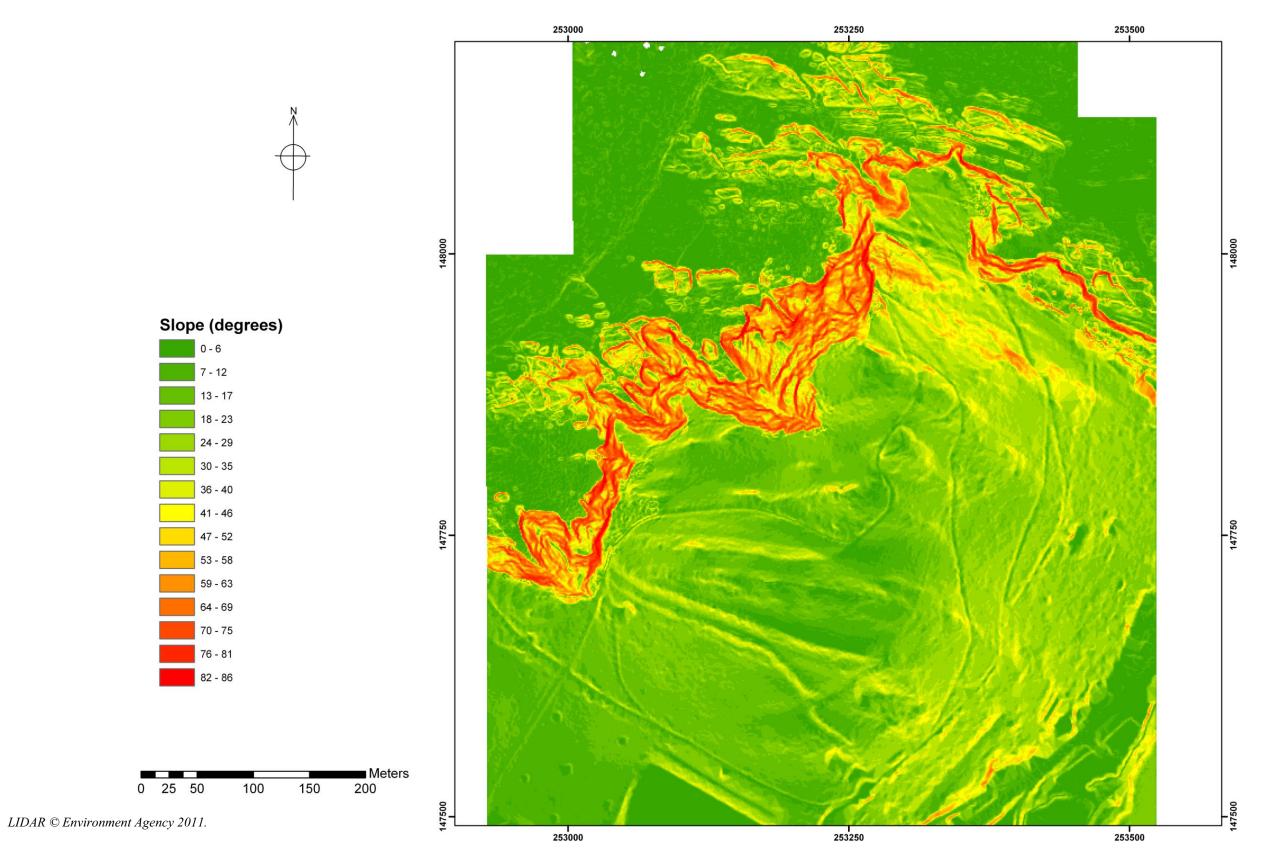


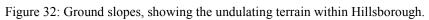








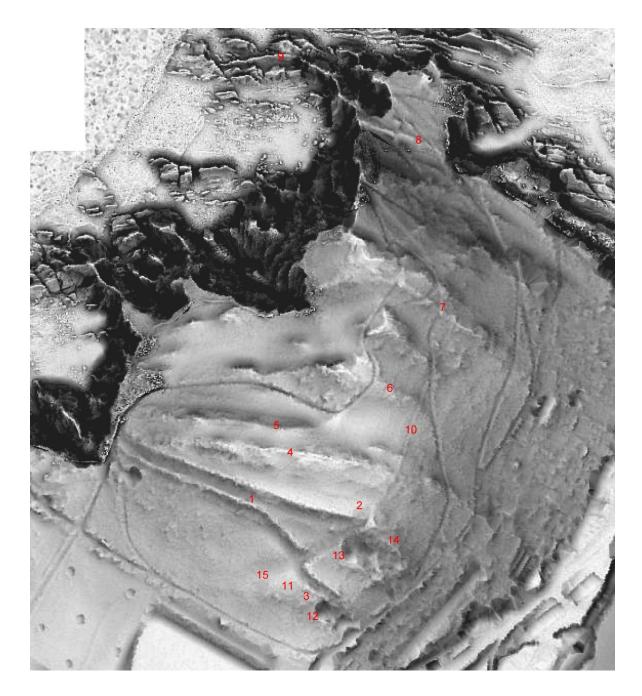




#### 6.3 Interpretations of LiDAR data

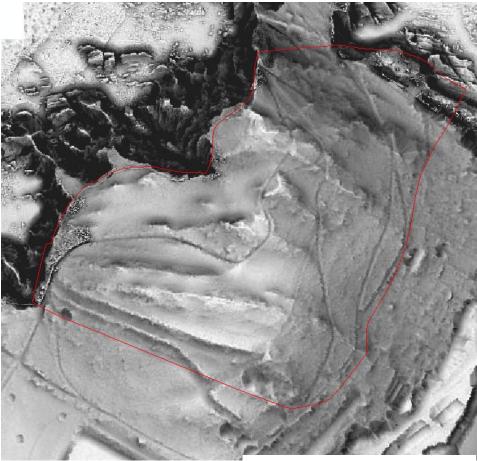
The following observations are made on the basis of these plots. Within the time-frame available, it has not been possible to validate any of the observations on the ground.

- A. Some possible bank slippage is visible on both ramparts broadly centrally (Figure 33; 1). The friable nature of the soils can lead to swift movement once de-vegetated. This is also visible on the conventional hillshade plot.
- B. The entrance through the upper rampart is not consistent with the Ordnance Survey plan as recorded. The in-turn of the upper western rampart is barely visible (Figure 33; 2).
- C. There are indications of a ditch, or a secondary scarp below the lower eastern rampart (Figure 33, 3).
- D. The linear clarity of the two ramparts contrasts with the less continuous marks from natural banks formed from the folding of rocks e.g. Figure 33; 4, 5, 6, 7, 8 and 9.
- E. A positive linear feature running north south for some 160m (Figure 33; 10). This is consistent with a field boundary represented on the Tithe Map.
- F. A possible platform is visible (Figure 33; 11).
- G. The approach to the entrance to the fort is slightly hollowed over a distance of some 50m to the south of the southern ramparts, and for over 65m between the ramparts. The hollowing is up to 13.5m wide (Figure 33; 15)
- H. Slight ridges appear on the edges of the quarry holes perhaps as protective devices (Figure 33; 12-14).
- I. The Scheduled boundary of the promontory fort, passes through the ramparts and entrance (Figure 34).



LIDAR © Environment Agency 2011.

Figure 33: Detail of Sky-View model with points of interpretation.



LIDAR © Environment Agency 2011.

Figure 34: Plan showing Scheduled Monument boundary cutting across ramparts in south-east corner

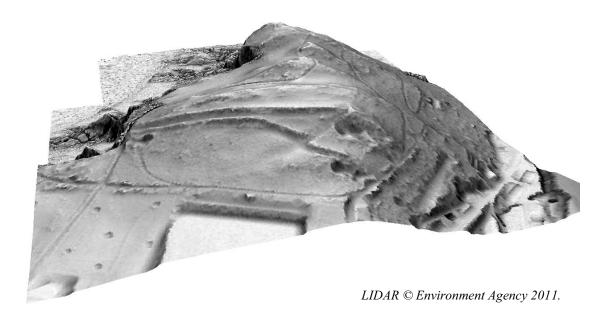


Figure 35: Pseudo 3 dimensional image using Sky-View shade model from south

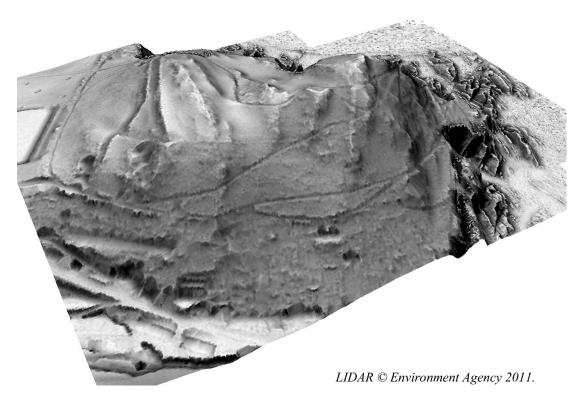


Figure 36: Pseudo 3 dimensional image using Sky-View shade model from east



LIDAR © Environment Agency 2011.

Figure 37: Pseudo 3 dimensional image using Sky-View shade model from north

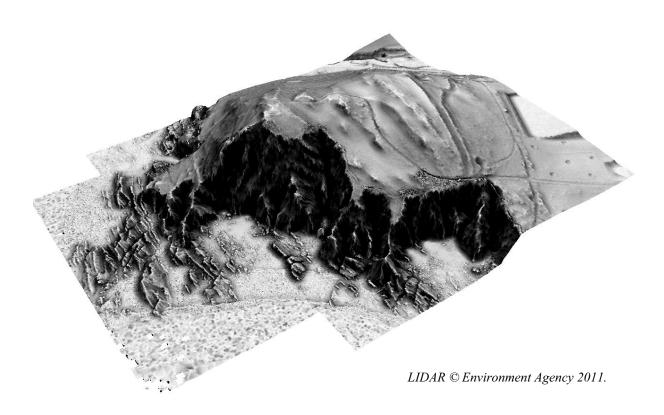
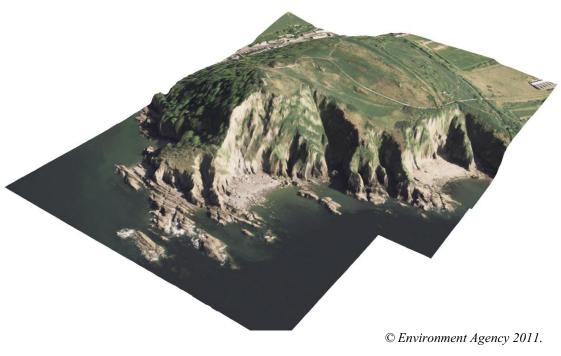


Figure 38: Pseudo 3 dimensional image using Sky-View shade model from west



*LiDAR* © *Environment Agency 2011.* RGB Aerial Photography England – © GeoPerspectives

Figure 39: Hillsborough from south-east. Satellite photo combined with DTM data and manipulated as pseudo 3 dimensional image.



RGB Aerial Photography England – © GeoPerspectives

Figure 40: Hillsborough from north-wast. Satellite photo combined with DTM data and manipulated as pseudo 3 dimensional image.

# 7. Discussion

## The Banks

The form of the banks is not currently clear due to thick and extensive vegetation (although plotting of the current earthworks has been possible by virtue of LiDAR survey). Fox describes 'two lines of low ramparts strengthened by scarping' (Fox 1996, p39) while more specifically Whybrow describes the ramparts as 'formed of material drawn down from their upper sides, but for a few yards towards the western ends there are signs of a ditch', while adding that a 20 yard wide flattened area above the northern rampart was a likely source of rampart material. A flat area can be distinguished above the northern rampart in a Slope plot (Figure 32). Ditches were also identified by Walls (2000) who, cited in the HER records describes 'Earthworks consist of two linear banks, much only surviving as scarps, with ditch surviving in places at each end'.

The prominent bank to the north of the upper rampart is a natural outcropping of stone, on the line of which a stone boundary wall has later been formed which has now collapsed (Figure 33; 4).

The HER cites F.M.Griffiths who argued that the two ramparts themselves were partly natural and were parallel among other cliff top scarps in the immediate vicinity. 'These features are certainly in part geological in origin, deriving from the extreme folding of harder and softer rocks in this area, with subsequent differential erosion. The degree to which this natural feature has been intensified and enhanced by human activity is currently hard to determine since the whole area is heavily overgrown with scrub. (Griffith, F. M. 1987)'. The hillshade and Sky-View plots both show the ramparts quite differently to the numerous parallel natural ridges that are also clear crossing the site west to east. The two ramparts are more sharply defined with fewer irregularities, and appear to a large degree archaeological in origin from the Lidar data.

### The entrance

Inturned entrances are apparent in both upper and lower ramparts, but survival is differential and asymmetric, and there has clearly been later disturbance and in places some slippage. Divergence of the ramparts to the west of the entrances has led to a distance of up to 60m between the entrance points of upper and lower rampart, which must surely have been a defensive weakness if defence were its purpose.

Virtually none of the eastern upper rampart is visible in the LiDAR survey. Due to the difficulty presented by the vegetation which is commented upon by various visitors, and the difficulties in surveying steep topographies, it is not at all clear whether earlier plans showing more complete survival were possibly to some degree exaggerated.

Visible in the LiDAR data to the south of the entrance is what appears a small sub-circular area up to 20m across (Figure 33; 11). This may be illusory and highlighted only by a path around the southern edge. Alternatively, there may be an archaeological origin for this, and further inspection is recommended.

Also visible in the LiDAR data, is a hollowing of the approach below the southern entrance, and between the two ramparts. This hollowing, over distance of 116m overall, up to 13.5m wide, implies a longevity of use at some stage in the site's history.

## *Cliff Castles:*

The best interpretation of Hillsborough is as a Promontory Fort or Cliff Castle. The distinctive coastal promontory location and banks are paralleled by similar sites on the north Cornish coast (Whybrow 1967, 16). Hillsborough is not a Hill Fort, which are found inland. Cliff Castles are distinctive, with access to the area of a coastal headland restricted by cross ramparts. The majority of Cliff Castles in the South West are multivallate and are ascribed a Late Iron date (Cripps 2007, 146). The conventional interpretation of a Cliff Castle was of a high status defended site (Nowakowski and Quinnell 2011, 371). Current interpretations of Cliff Castles are that they were the retreat of a social elite, and/or the focus of communal activities (Cripps 2007, 147). Other arguments have been made that the location of Cliff Castles on exposed promontories was for religious, and not domestic reasons (Cunliffe 2001, 346).

Where excavated (and usually excavation has covered only a very small fraction of total enclosed areas), a range of Iron Age domestic and industrial activities have been identified within Cliff Castles. Some authors have warned that the *considerable variety and complex histories* of cliff castles not be over simplified or mis-interpreted as the coastal mimic of the inland hill fort (Nowakowski and Quinnell 2011, 371).

## Dating

Despite frequent visits to the site in the modern period as Hillsborough became part of Ilfracombe's tourist attractions, and the construction and maintenance of surfaced paths and a number of shelters across the site, only three pieces of flint are reported as having been found on the site (and these are not provenanced in detail), and no Iron Age material whatsoever.

Geophysical survey including gradiometer and earth resistance surveys has recently been undertaken over some over some 0.75ha of the interior of the monument, to the north and north-west of the entrances (Carey 2011). Clear archaeological deposits were not positively identified by these surveys.

At the Cliff Castle of Trevelgue Head in Cornwall surface recovery from the 19th Century onwards included pottery, slag, metalwork, animal bone, perforated bone, glass beads, a spindle whorl, and quantities of lithics including a hammerstone, (Nowakowski and Quinnell 2011, 7-8): an occupied site that suffers from degrees of erosion combined with frequent visits will often yield artefacts indicative of date and type of occupation.

Therefore it is of note that absolutely no Iron Age indicator has been reported to have been found from Hillsborough: this may indicate that any use was particularly short-lived, or that the areas used within the site were tightly located and have neither eroded or been crossed by modern paths. Plotting of the slopes within the monument shows the lack of ground suitable for occupation (Figure 32).

The relocation of the Cist burial might assist in the interpretation of the site and the dating of the ramparts. However, unless the chamber still contained dateable information, any potential would be limited and not provide unequivocal chronology.

# Other Sites

There are a number of elements that point to the significance of Hillsborough in the early modern period. The inclusion of the area within a holidaymaker's itinerary, and other past uses are evidenced by the existing structures that survive to greater and lesser degrees. These include shelters, the remains of a tea shop and public conveniences, viewing points, a lime kiln and a gun battery.

# Public Perception and Interpretation

Public perception of the site will not improve so long as the earthworks are overgrown. Despite a substantial effort to clear vegetation in recent years, there has been swift regeneration which has masked much of the ramparts and the entrances, once again. Furthermore, regeneration of scrub, with no grass binding of soil layers leads to instability of soils.

The site is difficult to interpret due to the lack of evidence of dating – apart from the site's clear appearance, and parallels. This difficulty of interpretation will remain in the absence of further information either from survey or excavation.

The site's history is not limited to the later prehistoric period, and there is information relating to its use in the early modern period as part of Ilfracombe's tourist attractions. Existing photographs of Victorian and Edwardian structures which remain on the site would be of great interest to the casual visitor. The role of Hillsborough in Ilfracombe's historic development is of interest and this could be highlighted in further interpretation. Although the remains of some the surviving historic structures are located in hazardous areas (e.g. the gun battery and limekiln), others are not (e.g. tea shop and shelters), and it would be possible to interpret these sites, and enhance a visitor's perception of the site. However, as is the case for the ramparts, unless the area around these sites were opened up in a sustainable way, any interpretive work will not have any long term value.

# 7. Recommendations

Broad recommendations are made below, relating to the future treatment of Archaeological sites recorded within the Hillsborough area have been considered. The significance of monuments (very high, high, medium, low, negligible and unknown) are taken from Highways Agency 2007.

UID	Monument Name	Туре	Significance	Form	Recommendations
2210	Hillsborough Promontory Fort, Ilfracombe	PROMONTORY FORT	High	Earthwork	Clear vegetation and establish mechanism by which clearance is maintained in a sustainable way, and soil erosion minimised. Placing of interpretation board/s at points closer to entrance would help visitors understand the site, it's topography, and it's form as a cliff-castle or promontory fort. The site is not a hillfort, and this misinterpretation should not be repeated. The current interpretation board in the field to the south-east is too distant from the earthworks and the entrance. Little is understood of Hillsborough's chronology or duration. Limited excavation of a ditch (or rampart) might provide better
					information for the site's interpretation.
2211	Beacon Point, Hillsborough	BEACON		Place name Evidence	-
12535	Possible Cist at Hillsborough Promontory Fort	CIST	High	Documentary Evidence (Photographic)	Following further clearance (or in winter) geophysics or GPR might be used to positively identify the location of the Cist. Although this will provide useful information in understanding the relationship of the Cist with the earthworks, it will not redefine the chronology of the site without further survey, probably necessarily including intrusive fieldwork.
62895	Flint Tools from Hillsborough	FLINT	Low	Find	-

UID	Monument Name	Туре	Significance	Form	Recommendations
	Promontory Fort				
54970	Shelter in Hillsborough Promontory Fort	BUILDING	Low	Extant Building	This structure is of local interest and continuing use on the site. Clear vegetation to maintain view to Ilfracombe. Possibly include interpretation board (perhaps within shelter?) illustrating historic context of shelter and other shelters on the site, and explaining how Hillsborough became part of Ilfracombe's tourist itinerary in the Victorian/Edwardian periods. See 1 <sup>st</sup> edition Ordnance Survey of shelter.
75628	Shelter in Hillsborough Promontory Fort	BUILDING	Low	Extant Building	This rock cut structure is local interest and continuing use on the site. Research date of construction and identify any historic photographs showing the structure for possible inclusion on interpretation boards.
75630	Shelter in Hillsborough Promontory Fort	BUILDING	Low	Ruined Building	This ruined structure cut into the northern side of the hill is lost in overgrowth. If this structure remains unroofed, there will be inevitable long term damage to the remaining fabric, and ultimately collapse and loss. If the structure is allowed to collapse, any potential impact on the path which passes 2m to the south needs to be assessed as this may present a hazard.
75631	Structure near Gun Battery in Hillsborough Promontory Fort	STRUCTURE	Medium	Structure	This small brick built structure probably the magazine to the volunteer gun emplacement would benefit from being cleared and visible for public interpretation. If recording were to be undertaken for the Gun emplacement with which it is believed to have operated, recording of this structure could also be undertaken. The structure will remain difficult to access without determined and sustained clearance. The creation of an appropriate record would mitigate a management policy of no intervention.
75634	Small Building in Hillsborough Promontory Fort	BUILDING	Low	Extant Building	Rear wall of structure backs on to path. Vegetation currently prevents access.
75637	Tree Clump near Hillsborough Promontory Fort	TREE CLUMP		Documentary Evidence (Cartographic)	

UID	Monument Name	Туре	Significance	Form	Recommendations
75638	Guide Post in Hillsborough Promontory Fort	SIGNPOST		Documentary Evidence (Cartographic)	
75639	Guide Post in Hillsborough Promontory Fort	SIGNPOST		Documentary Evidence (Cartographic)	
75640	Guide Post in Hillsborough Promontory Fort	SIGNPOST		Documentary Evidence (Cartographic)	
75641	Guide Post at Hillsborough Promontory Fort	SIGNPOST		Documentary Evidence (Cartographic)	
75642	Guide Post at Hillsborough Promontory Fort	SIGNPOST		Documentary Evidence (Cartographic)	
75643	Urinal at Hillsborough Promontory Fort	PUBLIC CONVENIENCE		Documentary Evidence (Cartographic)	
75644	Flagstaff at Hillsborough Promontory Fort	FLAGPOLE		Documentary Evidence (Cartographic)	
75645	Flagstaff in Hillsborough Promontory Fort	FLAGPOLE		Documentary Evidence (Cartographic)	
75646	Gateposts at entrance to Hillsborough	GATE PIER		Structure	
62893	Limekiln at Hillsborough	LIME KILN	Low	Structure	Ruined and overgrown. Building recording at appropriate level to classify.
62894	Quarry at Hillsborough Promontory Fort	QUARRY		Documentary Evidence (Cartographic)	
75648	Quarry at Hillsborough Promontory Fort	QUARRY		Documentary Evidence (Cartographic)	

UID	Monument Name	Туре	Significance	Form	Recommendations
63451	Linear Earthwork at Hillsborough Promontory Fort	LINEAR FEATURE		Earthwork	
56279	Gun Battery at Beacon Point, Hillsborough	BATTERY	Medium?	Documentary Evidence (Photographic)	This structure is at risk of being lost to erosion in its entirety. A recording programme should be established to record the remaining form in sufficient detail. Such a programme would require detailed Risk Assessment at an early stage.
12538	Possible Mound in Hillsborough Promontory Fort	MOUND		Documentary Evidence (Cartographic)	
Observation 1	Remains of Tea shop, with wooden benches		Low		The remains of this structure are being lost in scrub. If area of structure can be cleared and the view to Ilfracombe harbour re- established, the benches that have been installed might be used by visitors.
Observation 2			Low		The presence of the stone work needs to be noted so that it is respected when the recutting of paths occurs.
Observation 3			Low		The presence of the stone work needs to be noted so that it is respected when the recutting of paths occurs.
Observation 4					
Observation 5			Low		The railings are aesthetically finer than the concrete posts and tubular rail that succeeded them but of low value.
LiDAR interpretation A	possible bank slippage is visible on both ramparts broadly centrally		Unknown		Confirm through ground survey
LiDAR interpretation B	The entrance through the upper rampart is not consistent with the Ordnance Survey plan as recorded. The in-		High		Confirm through ground survey

UID	Monument Name	Туре	Significance	Form	Recommendations
	turn of the upper western rampart is barely visible				
LiDAR interpretation C	There are indications of a ditch, or a secondary scarp below the lower eastern rampart.				Confirm through ground survey
LiDAR interpretations F & G	A possible platform & hollowed approach		Unknown		Confirm through ground survey
LiDAR interpretation I	TheScheduledboundaryofthepromontoryfort,passesthroughtherampartsand entrance		High		Extend boundary of Monument to include entrance through lower rampart.

# 8. Archive

The archive consists of this report, and digital and black and white photographs.

It will be deposited with Museum of Barnstaple & North Devon under accession code NDDMS 2011.32 in due course.

# 9. Acknowledgements

Thanks to Dave Edgecombe of North Devon AONB for his help with the walkover survey, and his information regarding the site and to Fiona Fyfe for her enthusiasm, collaboration and organisation.

The HER data was supplied by Marrina Neophytou of Devon County Council, and the LIDAR data by Mike Plant of the Environment Agency Geomatics Group

Thanks to the Marine Court, Hillsborough Road, Ilfracombe for providing such a very local base for the site visit.

Thanks to Mark Gillings for pointing me in the direction of Sky-View analysis, and to Chris Carey for the Geophysical survey data from Hillsborough.

Thanks to John Moore for his permission to reproduce his research on the Cist, as an appendix to this report.

# **10. Bibliography**

Carey, C., 2011. Hillsborough Hill Top Enclosure geophysical survey report, Carey Consulting

Cripps, L., 2007. 'Re-situating the Later Iron Age in Cornwall and Devon' in C. Haselgrove and T.

Moore (ed.) The Later Iron Age in Britain and beyond. Leicester: University of Leicester

Crutchley, S., 2010. *The Light Fantastic - using airborne lidar in archaeological survey*. Swindon: English Heritage.

Cunliffe, B., 2001. *Facing the Ocean, The Atlantic and its Peoples 8000BC-AD1500*. Oxford, New York: Oxford University Press.

Fox, A., 1996. Prehistoric Hillforts in Devon. Tiverton: Devon Books.

Fyfe, F., 2011. Hillsborough Management Plan. Fiona Fyfe Associates.

Highways Agency, 2007. DMRB Volume 11, Section 1, 2 and 3, Part 2 HA208/07. Cultural Heritage.

Moore, J. n.d., *Hillsborough Promontory Fort*, <u>http://www.johnhmoore.co.uk/hele/hillsborough.htm</u> last accessed 30/08/2011

Mudge, 1809. Ordnance Survey. The second part of the general survey of England and Wales containing the whole of Devon. - London

Nowakowski, J.A., and Quinnell, H., 2011. *Trevelgue Head, Cornwall: the importance of CK Croft Andrew's 1939 excavations for prehistoric and Roman Cornwall.* Cornwall: Cornwall Council.

Ordnance Survey, 1890. 1st edition, County Series, Devon, 1:2500 SS54

Ordnance Survey, 1932. 3rd Revision, County Series, Devon, 1:2500 SS54

Slade-King, Mrs, 1879. 'Notes on the Older Times of Ilfracombe', *Report and Transactions of the Devonshire Association*, Vol XI, p161-167

Walls, T., 2000. *The Archaeology of Hillsborough, Ilfracombe* A Management Plan, thesis for MA Landscape Archaeology, Bristol University 1999-2000

Whybrow, C., 1967. Multivallate Hill-Forts on Exmoor and in North Devon, Transactions of Devon Archaeological Society, Vol 25, pp1-18

Zakšek, K., Oštir, K., Kokalj, Ž., 2011. Sky-View Factor as a Relief Visualization Technique. Remote Sensing, **3**, 398-415.

# Appendix 1. NMR List Entry for Hillsborough

### List Entry Summary

This monument is scheduled under the Ancient Monuments and Archaeological Areas Act 1979 as amended as it appears to the Secretary of State to be of national importance. This entry is a copy, the original is held by the Department for Culture, Media and Sport.

Name: Hillsborough promontory fort

List Entry Number: 1002512

#### Location

Not currently available for this entry.

The monument may lie within the boundary of more than one authority.

County: Devon

District: North Devon

District Type: District Authority

Parish: Ilfracombe

National Park: Not applicable to this List entry.

Grade: Not applicable to this List entry.

This record has been generated from an "old county number" (OCN) scheduling record. As these are some of our oldest designation records they do not have all the information held electronically that our modernised records contain. Therefore, the original date of scheduling is not available electronically. The date of scheduling may be noted in our paper records, please contact us for further information.

Date first scheduled:

Date of most recent amendment: Not applicable to this List entry.

# Legacy System Information

The contents of this record have been generated from a legacy data system.

Legacy System: RSM - OCN

UID: DV 414

# Asset Groupings

This List entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

# List Entry Description

Summary of Monument

Not currently available for this entry.

# Reasons for Designation

Not currently available for this entry.

History

Not currently available for this entry.

## Details

This record has been generated from an "old county number" (OCN) scheduling record. These are monuments that were not reviewed under the Monuments Protection Programme and are some of our oldest designation records. As such they do not yet have the full descriptions of their modernised counterparts available. Please contact us if you would like further information.

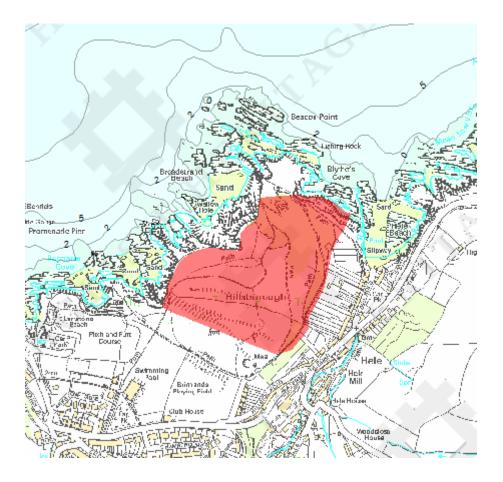
## Selected Sources

Legacy Record - This information may be included in the List Entry Details.

# Мар

National Grid Reference: SS 53263 47763

The below map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF -  $\frac{1002512.pdf}{1002512.pdf}$ 



© Crown Copyright and database right 2011. All rights reserved. Ordnance Survey Licence number 100019088.
 © British Crown and SeaZone Solutions Limited 2011. All rights reserved. Licence number 102006.006.

This copy shows the entry on 24-Aug-2011 at 09:54:04.

# Appendix 2.Evidence for the CistJohn Moore

Reproduced from <u>http://www.johnhmoore.co.uk/hele/hillsborough.htm last accessed 30/08/2011</u> with permission

#### (3) Possible Burial cist 1937

"In August 1937 an area of gorse on the hill caught fire. In digging a trench to prevent the fire from spreading, council workmen discovered a cavity in the ground BRONZE AGE CYST similar to those found in Cornwall but none had ever been found as far east as this before. Mr Palmer...Curator (and founder) of the museum, tried hard to persuade the UDC to rail off the cavity so that it could be properly studied for future generations. His efforts were unsuccessful and the site was filled in and is now overgrown with gorse" (Hillsborough folder, Ilfracombe Museum, with photograph of cist taken by MG Palmer (ILFM 9775)), shown above

"A letter was read from Mr Mervyn Palmer stating that during the recent outbreak of fire on the western slope of Hillsborough the Council's workmen uncovered a small cavity in the hillside just above the ancient earthwork. This cavity might prove to be of archaeological importance and pending a definitive pronouncement on the matter he requested that the cavity might be temporarily railed off in order to prevent interference from unauthorised persons. In the event of the experts considering it advisable the Museum Committee might apply later for permission to carry out a scientific excavation on the site. It was moved by Mr R Fairchild, seconded by Mr Roulstone and resolved that the cavity be temporarily railed off." (Council minutes, extract from IC October 8th 1937, in Hillsborough folder, Ilfracombe Museum)

Mr Palmer must have sent the photograph of the cyst to the Ordnance Survey, who replied 1st November 1937 "The cavity to which you refer seems undoubtedly to be artificial and of some antiquity, although of course, it would be dangerous to express a more definite opinion without seeing the structure....If one might make a guess with regard to it one would say that it looks like an earthhouse or underground chamber, such as is found in Cornwall and much more commonly in Ireland or Scotland; but no earth houses so far have been known so far east as this. On the other hand the position on the Bristol Channel is such that it might well be an earth-house. The excavation of it if undertaken, should be entrusted to someone of experience in these matters" (Letter from OGS Garforth(?) to M Palmer 1st November 1937, Palmer box, Ilfracombe Museum)

"In August 1937 an area of the gorse on the hill caught fire. In digging a trench to prevent the fire from spreading Council workmen discovered a cavity in the ground - this had stone walls and a stone slab as a roof and bones were found nearby. It was thought that this was an ancient earth house, similar to those found in Cornwall. Previously none had been found as far east as this. Mr Palmer, who was at that time Hon. Curator of the Museum, tried hard to persuade the Urban District council to rail off the cavity so that it could be properly studied and left for future generations to see. His efforts were not successful and the site was filled in and is now overgrown with gorse. This find supports the theory that Hillsborough should more properly [be called] *Hele's Barrow* as it was known in earlier times. On the Donn map of 1765 it is called *Ellisborough* and on the Ordinance Sheet of 1809 (the first one ever made of this district) it was called *Helesborough*." (Probably by J Longhurst, Hillsborough folder, Ilfracombe Museum)

"After a gorse fire a Saxon grave and a number of human bones were found above Brimlands." (ICTG 1985-6 p 1)

*Earth house or cist* [at SMR SS54 NW15] found in 1937 and described as 'a cavity surrounded by drystone masonry and covered with a lintel, walling is part quarried and part drystone. Flooring is horizontal and covered with loose earth and stone chippings' Bones are recorded as being discovered nearby. The cavity was filled in but has since been interpreted as a *cist*, a *fogou* and an animal burrow. In Appendix 2 it is described as an *'iron age earth house'* [also known as a *fogou* or *souterrain*] (Walls 2000)

# Appendix 3. OASIS Information

INFORMATION REQUIRED	EXAMPLE		
Project Name	Hillsborough, Ilfracombe, Devon		
Project Type	Walk over survey and Lidar Analysis		
Project Manager	Matt Beamish		
Project Supervisor	Matt Beamish		
Previous/Future work	None/not known		
Current Land Use	Amenity		
Development Type	None		
Reason for Investigation	Request from North Devon AONB		
Position in the Planning Process	None		
Site Co ordinates	SS 5323 4776 (centre)		
Start/end dates of field work	July 2011		
Archive Recipient	Museum of Barnstaple & North Devon		
Accession No	NDDMS 2011.32		
Height min/max	-5.56 to 129.45m OD		
Study Area *	c. 18ha		
Finds	None		

Contact Details

Richard Buckley or Patrick Clay University of Leicester Archaeological Services (ULAS) University of Leicester, University Road, Leicester LE1 7RH

T: +44 (0)116 252 2848 F: +44 (0)116 252 2614 E: ulas@le.ac.uk w: www.le.ac.uk/ulas









# **THE UNIVERSITY OF THE YEAR 2008/9**