YCCCART 2013/Y 2 North Somerset HER 2013/99

Gradiometry Survey at Iwood (Mr Collins Field 8)

YATTON, CONGRESBURY, CLAVERHAM AND CLEEVE ARCHAEOLOGICAL RESEARCH TEAM (YCCCART)

General Editor: Vince Russett



Surveying in Arctic weather

Page	Contents
3	Abstract Acknowledgements Introduction
4	Site location Land use and geology
5	Historical & archaeological context
6	Survey objectives Methodology
7	Results
10	Recommendations References
11	Appendix – Site Record

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Abstract

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YCCCART has a project to establish the extent of the Congresbury Roman kiln sites and early settlement at Iwood. A gradiometry survey has revealed circular features and possible ditches either side of a trackway which may be associated with the Neolithic/Bronze Age flint scatter found in an adjacent field.

Acknowledgements

A Heritage Lottery Grant enabled the purchase, by YCCCART, of a Bartington 601 gradiometer without which this survey could not have been undertaken.

This survey would also not have been carried out without the willing permission of the landowner, Mr A Collins.

The authors are grateful for the hard work by the members of YCCCART in performing the survey and Vince Russett for editing this report.

Introduction

YCCCART is one of a number of Community Archaeology teams across North Somerset, supported by the North Somerset Development Management Team.

The objective of the Community Archaeology in North Somerset (CANS) project is to undertake archaeological fieldwork to enable a better understanding and management of the heritage of the area while recording the activities and locations of the research carried out.

Site Location



Fig 1: Site location.

The site is close to the hamlet of Iwood, in the parish of Congresbury in North Somerset. some 12 miles south of Bristol. (See site report in Appendix for GPS readings)

The field is privately owned.

Land use and geology

The field lies on the alluvial clays of the Northmarsh, in the floodplain of the Congresbury Yeo. It is currently used for grazing cattle and sheep.

Historical & archaeological context

Please see YCCCART reports 2010/Y16 and 2010/Y32 on this site for the history and archaeology of Iwood.

The North Somerset Heritage Environment Record map (Reference 07238 on the web site <u>http://map.n-somerset.gov.uk/HER.html</u>) shows that Richard Broomhead during his Parish Survey in 1987 found a Neolithic/Bronze Age flint scatter in an adjacent field.





The Tithe apportionment record, relating to the 1839 map above, shows the field 1780 as pasture owned by the Trustees of Queen Elizabeth Hospital and occupied by Elizabeth Willett.

Survey objectives

The survey was undertaken in order to continue to investigate the extent of the Congresbury Romano British pottery kilns and settlement at Iwood.

Methodology

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The survey of field was undertaken during the period January to April 2013 by teams from YCCCART, using a Bartington 601 gradiometer, with settings as per the site record in the Appendix.

The completed survey was downloaded to a TerraSurveyor program.

TerraSurveyor composites were adjusted using the following filters:

Standard settings
1) Colour - Red Blue Green 2
2) Band weight equaliser
3) Grad shade
4) Despiked
5) Destriped
6) Clip SD2

The report was written in Microsoft Word 2007.

Photographs were taken by members of YCCCART, and remain the copyright of YCCCART.

Results

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Fig 3: Grid layout and TerraSurveyor file names (below). Grids are 30m square.



1. The grids C1/2 (bottom) and D1/2 (top) in Fig 4 above show unusual circular features. These may be the result of agricultural activity. It is possible in view of the Neolithic/Bronze Age flint scatter found in an adjacent field that they are associated with this period.

2. C1/D1 & D2 contain parallel lines which constrict towards the right of D2. These may be ditches either side of a trackway. The high response suggests they contain high magnetic material, possibly associated with the circular features.

3) Grid B1 (top) and A2 to A5 (bottom) contain a horizontal line curving out of B1. This may be a palaeochannel or drainage ditch.



The colour image also shows the results mentioned in page 8. The high response area (see arrows in Fig 5 above and 6 below) could be the result of slag / buried metal and indicated the line of a hedge removed since 1971 (North Somerset HER run 45-2121 (1971).



Fig 5: TerraSurveyor axonometric view colour image. High readings are red.

Recommendations

An evaluation excavation of the potential ring ditch (circular features) to establish their nature and date would be useful.

References

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Bedingfield, G. 1996

Iwood, How long has it existed as a discrete settlement unit and how did this affect its economy, MA Dissertation. Bristol University 1996).

Congresbury Tithe Map

BRO 37959/9 (Bristol Record Office)

Authors: Ian Morton & Chris Short

Date May 2013

Appendix

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Site Records

YCCCART Site S	urvey			
Project - Congrest	oury kilns			
Survey date	-	11 th April2013		
Report date		11 th April2013		
Type /Instrument		Grad 601		
**				
		Pace : 1.5m/s	Grid size: 30m x30m	
		Lines/m : 1	Pattern : Zig Zag	
		Range:100nT	Samples/m:4	
		Volume: High	Audio: On	
		Sensors:2	Threshold:10nT	
		Reject:50 Hz		
Location		Land alongside Iwood Lane		
		See annex 1		
Ref		none		
Site name		Collins 8		
Landowner		Mr. Alan Collins, Little Iwood, Wrington Road, Congresbury,		
		BS49 5AR		
Tenant		None		
HER ref		TBC		
Site type		Open land		
Description		mowed pasture		
Period		Unknown		
Geology				
Land use				
Survey team and conditions				
3 rd January 2013	Team	Peter English, Ferdi, Janet Dickson and Ian Morton		
	Weather	Cool and overcast, ground saturated		
10 th January 2013	Team	n Ferdi, Mike Fox, Janet Dickson, Ian Morton		
	Weather	Cool and overcast, ground saturated		
17 th January 2013	Team	Ferdi, Mike Fox, Janet Dickson, Ian Morton		
	Weather	Cool and overcast, ground saturated		
14 th February 2013	Team	Ferdi, Mike Fox, Janet Dickson, Ian Morton		
41	Weather	Sunny, cool, ground saturated		
28 th February 2013	team	Ferdi, Janet Dickson, Ian Morton		
antha and a source	Weather	Cool and overcast		
25 th March 2013	Team	Peter English, Peter Wright, Chris Short, Janet Dickson, Ian Morton		
	Weather	Cold and overcast. Ground saturated		
28 ^m March 2013	Team	Peter English, Ferdi, Janet Dickson, Ian Morton		
11.4 10010	Weather	r Cold and overcast.		
11 April 2013 I eam Peter English, Peter Wright, Mike Fox, Janet Dickson, lai			ke Fox, Janet Dickson, Ian Morton	
1 1	Weather	Fresh with light shower at end o	of survey	

Survey area		notes		readings			
		size	walk direction	max	min	mean	
		1	30m x 30 m	S	+100.0	-100.0	-0.0
		2	30m x 30 m	S	+39.4	-44.0	-0.3
1		3	30m x 30 m	S	+32.1	-8.5	-0.3
	10/01/2013	4	30m x 30 m	S	+13.1	-23.8	-0.2
	10/01/2013	5	30m x 30 m		+12.8	-12.8	-0.1
		6	30m x 30 m	S	+28.8	-25.4	-0.7
		7	30m x 30 m	S	+23.4	-36.9	-0.5
		8	30m x 30 m	S	+36.1	-25.4	-0.6
		1	30m x 30 m	S	+100.0	-18.8	-0.9
		2	30m x 30 m	5	+100.0	-100.0	-0.2
		2	Electricity pole in grid.	5	100.0	100.0	0.2
	15/01/2012	3	30m x 30 m	S	+94.4	-50.2	+0.3
	17/01/2013	4	30m x 30 m	S	+6.0	-5.5	-0.0
		5	30m x 30 m	S	+25.6	-10.4	-1.5
		6	30m x 30 m	S	+7.0	-13.4	-1.9
		7	30m x 30 m	S	+100.0	-100.0	-1.8
		8	30m x 30 m	S S	+37.9	-20.1	-1.7
		9	30m x 30 m	~	+10.6	-15.8	+0.2
	14/02/2013		Mirror and return				
		10	30m x 30 m	Ν	+5.8	-17.9	+0.1
		11	Mirror and return	0	15.2	2.0	10.2
		11	Mirror and return	5	+3.2	-2.0	+0.2
		12	30m x 30 m	S	+99.9	-98.3	-0.5
			Mirror and return	~			
		13	30m x 30 m	S	+24.9	-29.6	-0.7
		1.4	Mirror and return			14.0	0.2
Grid ref #		14	30m X 30 m Mirror and return	8	+8.0	-14.8	-0.3
28		15	30m x 30 m	S	+23.2	-3.7	-0.0
		_	Mirror and return	5			
		16	30m x 30 m	S	+99.7	-100.0	-1.9
		1	30m x 30 m	S	+98.9	-28.0	+5.1
	28/02/2013		Mirror and return	~	. 1 5 0		
		2	30m x 30 m	S	+17.2	-7.5	+4.1
		3	30m x 30 m	S	+99.8	-100.0	+77
		5	Mirror and return	5	,,,,,	10010	,.,
		4	30m x 30 m		Operator e	rror	
			Mirror and return	Ignore r	eadings re	peated as 5	
		5	30m x 30 m Mirror and return	S	+96.5	-100.0	+4.3
		6	$30 \text{ m} \times 30 \text{ m}$	8	+23.2	-19.8	+4 1
		Ĭ	Mirror and return	6	- 25.2	17.0	
		7	30m x 30 m	N	+19.5	-10.2	+7.4
			Mirror and return				
		1	Dummy data				

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Survey area		notes		readings			
			size	walk direction	max	min	mean
	25/03/2013	1	30m x 30 m	S	+96.3	-25.5	+0.6
	Repeat of		Mirror and return				
	grids 1 & 2	2	30m x 30 m	S	+12.8	-3.7	-0.1
	from		Grid terminated				
	28/02/2013						
Grid	28/03/2013	1	30m x 30 m	S	+99.7	-57.5	+0.7
reference	Repeat of		Mirror and return				
	grids 3, A , 5		Grid terminated				
	and 6	2	30m x 30 m	S	+94.4	-100.0	+0.3
	From		Mirror and return				
	28/02/2013	3	30m x 30 m	S	+25.9	-38.9	+0.4
			Mirror and return				
		4	30m x 30 m	S	+7.9	-22.3	-1.8
			Mirror and return		Dama	at a famid 2	:41e
					кереа	at of grid 3	With
	11/04/2012	1	20 20	0		erent opera	
	11/04/2013	1	30m x 30 m	S	+15.1	-48.3	-1.7
	Repeat of	-	Mirror and return				
	grid 7from	2	30m x 30 m	S	+10.8	-80.6	-1.8
	28/02/2013		Mirror and return				
		3	30m x 30 m	Е	+14.0	-19.0	-1.6
			Mirror and return				

Annex 1 Setting out details

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Collins IX



Note on operation

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11/04/2013 Grids 1 & 2 walk south to align with most of rest of field

Grid 7 on 11/04/2013 - sketch of 601 operation

Grid 1

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traverses 1 thro 6. Start, three 'beeps' stop, mirror and return traverse 7 walk but ignore traverses 8 thro' 15 mirror and return. Real data

Grid 2

Traverse 1 thro' 6 walk up and down traverse 7 using mirror and return Traverse 8 thro' 15 mirror and return. Real data

Grid 3 Walk east mirror and return, terminate grid

Grid location details

	Grid Ref. All ST		
	eastings	northings	
А	345295.1	162843.7	
В	345268.5	162852.8	
С	345240.2	162864.6	
D	345210.4	162872.9	
E	345184.6	162884.9	
F	345155.5	162893.5	
G	345127.2	162903.4	
Н	345099.4	162914.7	
I	345069.1	162924.4	
	eastings	northings	
AA	345286.6	162813.8	
BB	345259.0	162825.0	
CC	345230.3	162836.1	
DD	345201.3	162845.6	





quiet spot TBC