YCCCART 2012/Y5 North Somerset HER 2012/100

Gradiometry Survey at Iwood (Mr Collins Field 7)

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General Editor: Vince Russett



The gradiometer in operation

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Abstract

YCCCART has a project to establish the extent of the Congresbury Roman kiln sites and early settlement at Iwood. A gradiometry survey appears to have revealed paleochannels, which relate to those recorded 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, but can be seen from the public footpath along the north side of the Yeo.

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.



Fig 2: 1839 Map. Courtesy of Bristol Record Office BRO 37959/9. The surveyed field is number 1580 on the map.

The Tithe apportionment record, relating to the 1839 map above, shows the field 1580 as pasture, called Common East Mead, owned and occupied by Benjamin Thayer.

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

The survey of field was undertaken during the period September to November 2012 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 an ArcheoSurveyor programme.

ArcheoSurveyor 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

A) Gradiometry



	15nov 05	<mark>15nov 06</mark>	15nov 07	15nov 08
15nov 04	40ct08	4oct07	4oct06	4oct05
15nov 03	4oct01	4oct02	4oct03	4oct04
15nov 02	20sep04	20sep05	20sep07	
15nov 01	20sep01	20sep02	20sep03	

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

Shade 15.05 nT Ν 0.76 0.43 0.25 0.11 0 -0.11 -0.25 -0.43 -0.76 11.6 nT 4 Palaeochannel? High level anomaly

Extension of ditch (leat?) from field to right (Collins 3).

Fig 4: Shade view colour image. High readings are red.

The results (see arrows in Fig 4 above) show what appears to be the line of the ditch (leat?) from the adjacent field to the right, a palaeochannel below and bottom right an area containing a high level anomaly. Several linear blue features (an especially clear one runs across the main survey area) are almost certainly the remains of grypes.

Fig 5: Axonometric view. High readings are red.

The high anomaly indicated again in Fig 5 above is in an area close to building debris revealed by a survey in Collins field 3 (See report YCCCART 2010 /Y16 and Fig 6 below). and also in a grid containing a large oak tree.

Fig 6: Survey field (left) in relation to adjacent field results.

The survey results from this report are top left. The ditch and palaeochannel from the current survey clearly link to the adjacent results to the right (north and south of the river).

Recommendations

A limited dig in the area of high anomaly is required to clarify the results of the geophysical investigations.

References

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: December 2012

Appendix

Setting out details

Gradiometer

YCCCART Site S	Survey				
Project – Congresbury kilns					
Survey date		15 th November 2012			
Report date		15 th November 2012			
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:1nT		
			Reject:50 Hz		
Location		Land between Iwood Lane and Venus Street			
		See annex A	annex A		
Ref		none			
Site name		Collins 7			
Landowner		Mr. Alan Collins, Little Iwood, Wrington Road, Congresbury,			
		BS49 5AR			
Tenant		none			
HER ref		TBC			
Site type		Open land			
Description		pasture			
Period		Unknown			
Geology					
Land use					
20 th September 2012	Team	Peter English, Ferdi, Shauni, Janet Dickson, Ian Morton			
	weather	Cool and overcast			
4 th October 2012	Team	Ferdi, John Wilcocks, Geoff Pearson, Ian Morton			
	weather	Cool and overcast			
15 th November 2012	Team	Ferdi, Mike Fox, Janet Dickson, Ian Morton			
	weather	Cool and overcast			

Survey area		notes		readings		
- -		size	walk	max	min	mean
			direction			
	1	30 x 30 m	N	+23.3	-38.3	+0.5
	2	30 x 30 m	N	+26.7	-14.2	+0.6
	3	30 x 30 m	N	+71.8	-41.0	+1.2
20/00/1012		Mirror and				
20/09/1012		return				
	4	30 x 30 m	N	+12.1	-2.8	-0.0
	5	30 x 30 m	N	+41.2	-5.9	-0.1
	6		Ignore read	lings Grid aband	doned	
	7	30 x 30 m	N	+16.7	-51.2	-1.2
		Mirror and				
		return		.15.6	24.5	1
	1	30 x 30 m	N	+15.6	-34.7	+0.1
	2	30 x 30 m	N	+21.6	-14.3	-0.2
	3	30 x 30 m	N	+11.5	-5.3	-1.2
	4	30 x 30 m	IN	+27.9	-14.6	-1.3
		return				
	5	30 x 30 m	S	+9.2	-24.3	_2.1
	5	Mirror and	5	19.2	-24.5	-2.1
		return				
04/10/2012	2	Grid				
		terminated				
	6	30 x 30 m	S	+100.0	-61.3	-1.2
		Mirror and				
		return				
		Grid				
		terminated				
	7	30 x 30 m	S	+22.1	-87.1	-2.1
		Grid				
		terminated	<u> </u>		14.6	1.0
	8	30 x 30 m	S	+27.9	-14.6	-1.3
		30 x 30 m	8	+100.0	-100.0	-2.0
	Large Oak In					
	2	30 x 30 m	S	+32.6	-69	_0.1
	3	30 x 30 m	S	+9.4	-5.1	-0.1
	4	30 x 30 m	S	+22.8	-18.0	-07
	5	30 x 30 m	N N	+38.2	_41.7	_1.0
15/11/2012		Grid	19	130.2	-41.7	-1.0
		terminated				
	6	30 x 30 m	N	+100.0	-100.0	-15
	Ŭ	Grid	- '	100.0	100.0	1.0
		terminated				
	7	30 x 30 m	N	+60.4	-61.9	-1.9
		Mirror &				
		return				
	8	30 x 30 m	S	+75.5	-40.4	-1.7
		Grid				
		terminated				

Annex 1

Grid location details

