YCCCART 2014 / Y 7 North Somerset HER 2014/070

Gradiometry Survey off Brinsea Road. Congresbury. Mr Tutton Field Number 5

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

General Editor: Vince Russett



A piece of Congresbury ware, Romano-British pottery. Base of big pot?

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Abstract

YCCCART has a project to establish the extent of the Congresbury Roman kiln sites. A gradiometry survey has revealed, what appears to be, previously unknown kilns.

Acknowledgements

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

This survey would also not have been carried out without the willing permission of the the landowner Mr K Tutton.

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

The site is in Congresbury and is adjacent to Brinsea Road.

Land use and geology

The site lies to the south of the flood plain of the natural course of the Congresbury Yeo. The geology is Carboniferous Limestone, Keuper Marl and estuarine alluvium

The field is private with no public access and is used for grazing.

Historical & archaeological context

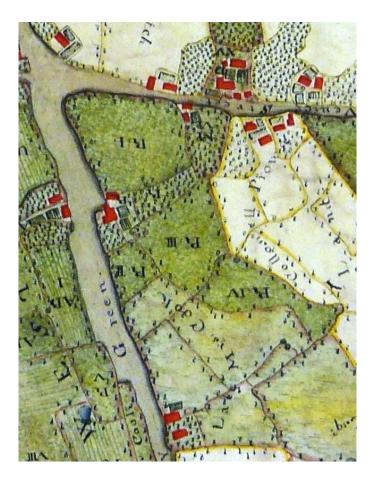


Fig 2: De Wilstar map of 1739. Courtesy of Bristol Record Office. Reference 33041/BMC/4/PL1/2. Note the map is upside down hence the lettering is the wrong way up.

Ν

The index to the De Wilstar Map of 1739 (Fig above) shows: Field R1 as Barne Close. Fields R2 and R 3 are called Browns Ground.

Tithe Map

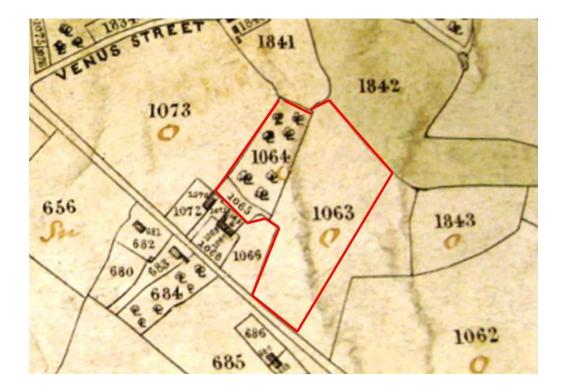


Fig 3:1839 Map. Courtesy of Bristol Record Office BRO 37959/9.

The area under survey has been outlined in red on the Tithe map in Fig 3 above. The relevant field numbers are 1063, 1064, 1065 and 1843.

The Tithe apportionment record, relating to the 1839 map above, shows the area field numbers:

1063: Pasture described as "Browns Land and Allotments."1064: Orchard1065: Barton

The Trustees of Queen Elizabeth Hospital owned the land, which was occupied by Anne Osmond.

Survey objectives

The survey was undertaken in order to establish if further unknown Romano–British kilns could be located.

Methodology

The survey of field was undertaken during April 2014 by a team from YCCCART, using a Bartington 601 gradiometer.

The completed survey was downloaded to a TerraSurveyor program.

TerraSurveyor composites were adjusted using the following filters:

- Band weight equaliser
- Grad shade
- Despike
- Destripe
- Clip SD2
- Red Green Blue 2 (Colour image)

The report was written in Microsoft Word 2007.

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

Results

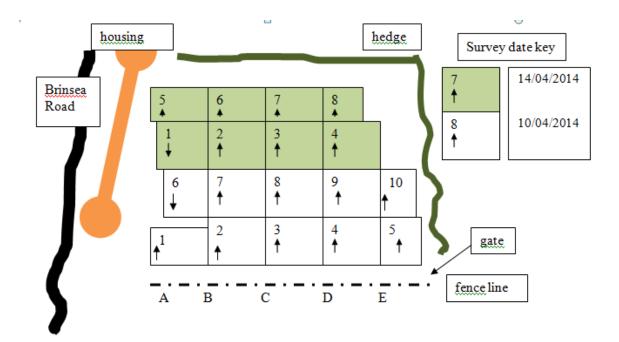


Fig 4: Grid lay out

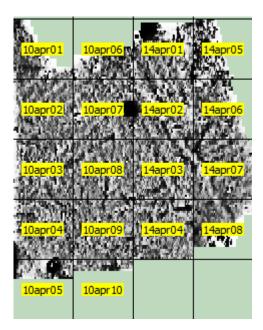


Fig 5: TerraSurveyor grid.

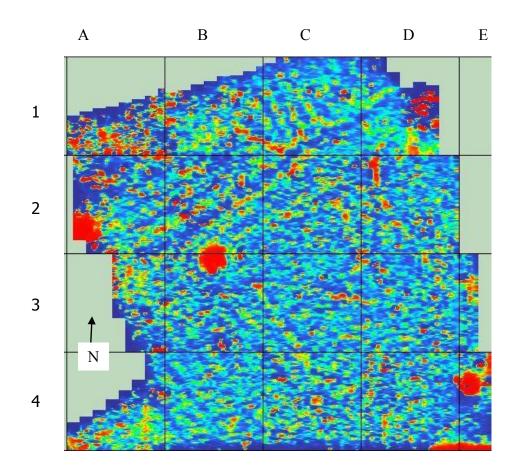


Fig 6: TerraSurveyor colour shade image. High readings are red.

1) The area of the orchard, numbered 1064 in the Tithe map in Fig 3 above, can be seen most clearly as the blue lines in grids 2A in fig 6 above which continue north eastwards intro grid 2B.

2) The anomalies at the bottom of grid 1A and top of grid 2A are probably the result of the landfill bordering Brinsea Road, referred to in the report Mrs Meaker field 3, YCCCART 2014 / Y6.

3) The large red circular features at the top of grid 3B and 4E may be the result of metal farm waste.

4) The Roman pottery kiln sites are generally indicated in gradiometry surveys by strong negative (blue) and positive peaks (red) immediately adjacent to each other. In Fig 6 above grid 1D may contain previously unknown kilns.

5) Other grids such as grid 3B contain smaller adjacent negative and positive peaks, which may indicate kiln waster sites.

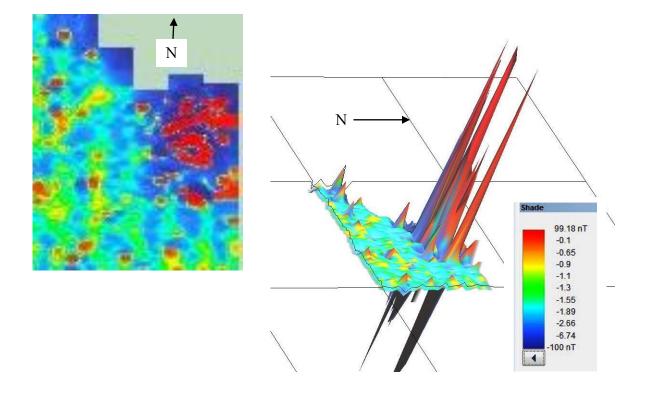


Fig 7 : TerraSurveyor images of grid 8 14th April. Left- Shade image. High readings are red. Right – 3D image. High readings are red.

The 3d image of grid 1D in Fig 7 above clearly shows the high red peaks and adjacent blue negative peaks suggestive of Romano British kilns.

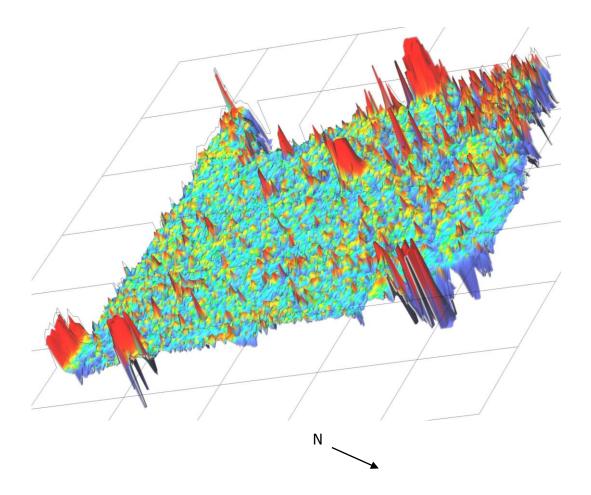


Fig 8 TerraSurveyor 3d colour image. High readings are red.

The 3d image in Fig 8 above confirms the potential kilns bottom right.

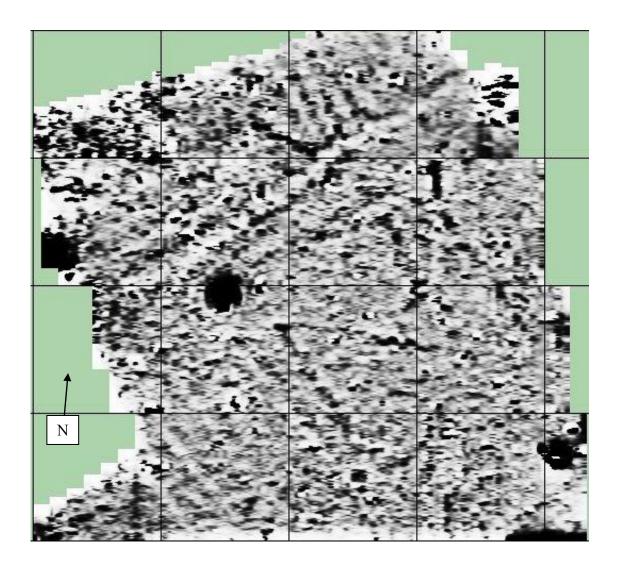


Fig 9: TerraSurveyor black & white shade image. High readings are black.

The black and white image in Fig 9 above clearly shows the line of the old orchard (see Fig 3 above) as parallel lines in the top grids running south west to north east. The 3rd grid across and down contains a V shaped anomaly, below which are several possible circular features.

Recommendations

Review when all project results are available.

References

Congresbury Tithe Map 1839

De Wilstar map of 1739

BRO 37959/9. (Bristol Record Office)

BRO 33041/BMC/4/PL1/2. (Bristol Record Office)

Authors: Chris Short

Date: May 2014

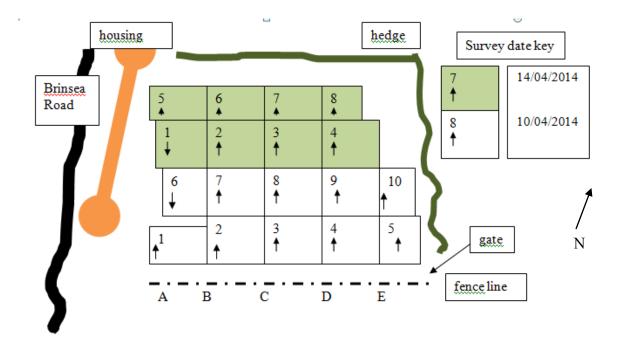
Appendix

Site Record

YCCCART Site S	Survey			
Project – Tutton 5	– Congresbu	ry Kilns projects		
Survey date		14 th April 2014		
Report date		14 th April 2014		
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		Adjacent Brinsea Road		
Ref		none		
Site name		Tutton 5		
Landowner		Mr. Keith Tutton		
Tenant		None		
HER ref				
Site type		Open land		
Description		Grazing		
Period				
Geology				
Land use		Grazing		
Survey team and conditions				
10/04/2014	Team	Peter Wright, Ferdi, Mike Fox, Janet Dickson, Ian Morton		
	weather	bright		
14/04/2014	Team	Peter Wright, Ferdi, Peter English, Arthur Langley, Janet Dickson,		
		Ian Morton		
	weather	Sunny and warm		

Survey area		note	notes		readings		
	-	size	walk direction	max	min	mean	
Date	Grid number						
10/04/2014	1	30m x 30 m Mirror and return	N	+22.6	-100.0	-3.0	
	2	30m x 30 m	N	+5.9	-14.6	-0.0	
	3	30m x 30 m	N	+17.9	-28.6	-0.5	
	4	30m x 30 m	N	+50.9	-28.6	-0.5	
	5	30m x 30 m Grid truncated	N	+99.9	-100.0	-3.3	
	6	30m x 30 m Grid truncated	S	+73.8	-100.0	-5.5	
	7	30m x 30 m	N	+100.0	-100.0	-0.2	
	8	30m x 30 m	N	+13.4	-21.1	-0.5	
	9	30m x 30 m	N	+14.6	-17.8	-0.5	
	10	30m x 30 m Grid truncated	N	+2.6	-4.7	-0.8	
	1	30m x 30 m Grid truncated	S	99.2	-100.0	-0.5	
	2	30m x 30 m	N	+27.7	-18.6	-0.9	
14/04/2014	3	30m x 30 m	N	+14.0	-12.1	-0.1	
	4	30m x 30 m	N	+13.9	-5.9	-0.3	
	5	30m x 30 m Mirror and return	N	+69.3	-43.7	-6.6	
	6	30m x 30 m Mirror and return	N	+18.8	-54.2	-1.3	
	7	30m x 30 m Mirror and return	N	+10.2	-10.9	0.0	
	8	30m x 30 m Mirror and return Grid truncated	N	99.2	-100.0	-1.8	

Annex 1 Setting out details



Grid Ref.	All ST		
	eastings	northings	162692.00
A	344174.33	162686.07	
В	344204.16	162688.76	162691.00
С	344236.97	162688.74	162690.00
D	344264.30	162690.72	R ² = 0.9172
E	344295.10	162691.52	162689.00
			162688.00
			162687.00
			162686.00
quiet spot	344187.9	162692.6	162685.00 - 0.
			344 ^{160,09} 344 ^{30,09} 344 ^{20,09} 344 ^{20,09} 344 ^{260,09} 344 ^{20,09} 344 ^{20,09}