Mrs Craggs Field (Sproads Leaze) , Venus St, Congresbury. Gradiometry Survey 2009

YCCCART 2010/5

North Somerset HER 47507

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

General editor: Vince Russett



Geoff Pearson operating the Grad 601 – June 2009. Pete Wright supervising.

Contents

- 1 Abstract
- 2 Acknowledgements
- 3 Introduction
- 4 Site location
- 5 Land use and geology
- 6 Historical & archaeological context
- 7 Survey objectives
- 8 Methodology
- 9 Results
- 10 Recommendations for further work
- 11 References
- 12 Appendices
 - Appendix 1 Summary of weekly site records

1. Abstract

YCCCART has agreed with the Heritage Lottery Fund to undertake a project over the two years commencing May 2009 to establish the extent of the Congresbury Roman pottery kiln sites.

A number of potential kilns have been identified within the field by surveys with the Bartington Gradiometer 601. It is intended to carry out a resistivity survey on the site and produce a pseudosection of targeted potential kilns. Excavation of one kiln will then be considered.

2. Acknowledgements

A Heritage Lottery Grant enabled the purchase, by YCCCART, of a Bartington Gradiometer 601 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, Mrs V Craggs

The authors are grateful for the hard work by the members of YCCCART in performing the survey and Geoff Pearson for proof reading.

3. Introduction

Yatton, Congresbury, Claverham and Cleeve Archaeological Research Team (YCCCART) is one of a number of Community Archaeology teams across North Somerset, supported by the North Somerset Council Development Management Team.

The objective of the Community Archaeology in North Somerset (CANS) teams is to carry out archaeological fieldwork, for the purpose of recording, and better understanding of the heritage of North Somerset.

4. Site location



Fig 1 Site location

The site lies in the south east of the village of Congresbury, in the District of North Somerset. The centre of the site lies at ST 4463 6305 some 12 miles south of Bristol

The field is privately owned but crossed by a public footpath.

5. Land use and geology

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

Currently the field is not grazed but grass from the field is used for silage.

6. Historical & archaeological context

The field is centred on reference 1802 on the 1839 Congresbury map. This is described in the Tithe apportionment as pasture land called Sproads Leaze owned by Henry Cottrell and occupied by Edmund Osmond.

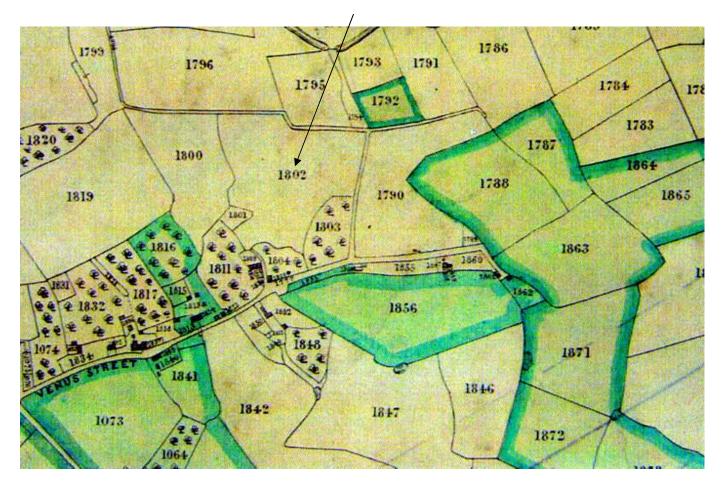


Fig 2. 1839 Map. Courtesy of Bristol Record Office (BRO 37959/9)

7. Survey objectives

The survey had the following objectives.

- 1) To identify any further Romano-British kilns.
- 2) To use the survey to train YCCCART members and members of Community Archaeology in North Somerset (CANS) in the use of the Bartington Gradiometer 601.

8. Methodology

Surveys were undertaken by teams from YCCCART in December 2009

The completed survey was downloaded to an ArcheoSurveyor programme and the resultant composite figure adjusted using the following filters

- 1) Colour Red Blue Green 2
- 2) Band weight equaliser
- 3) Grad shade
- 4) Destriped
- 5) Despiked

The report was written in Microsoft Word 2003.

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

9. Results

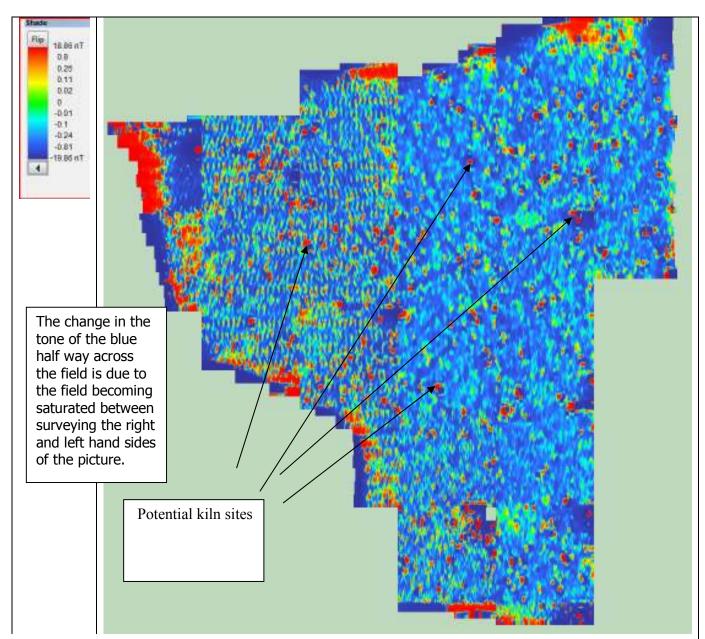


Fig 3 Shade View

Roman pottery kiln sites are generally indicated in gradiometry surveys by strong negative and positive peaks immediately adjacent to each other. In this case, a number show as high positive peaks (in this case, coloured red), and adjacent or surrounding negative peaks (coloured blue). These are shown in the figure above. Other, linear features in light blue, represent the magnetic signature of the drainage gripes in the field. Other high positive responses around the edges of the field are due to interference from items such as barbed wire and metal waste.

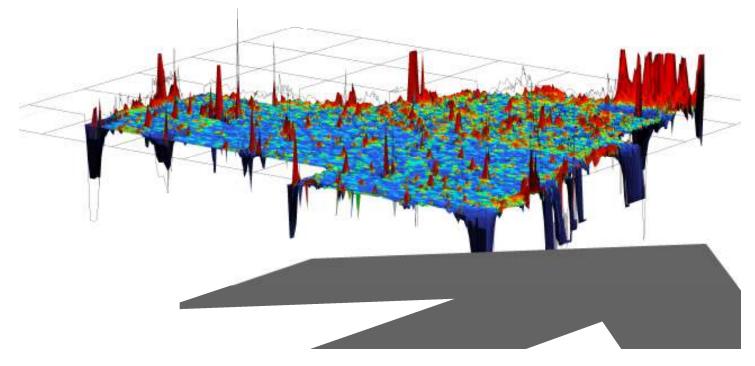


Fig 4: Axonometric view

These results illustrate the points made under the shade view. In this view, the potential kiln sites are indicated by red peaks surrounded by blue anti-peaks. Other high positive responses around the edges of the field are due to interference from items such as barbed wire and metal waste.

For orientation of results – See Appendix 1.

10. Recommendations for further work

The extremely useful results obtained in this survey indicate the potential sites of previously unknown Roman pottery kilns. However, the area close to the known waste heap where further kilns might well be expected, was unfortunately subject to some instrumental error, and will need to be re-examined. Further geophysical techniques can be used to try and characterise the potential kilns, and so it is recommended that

1) A pseudosectioning survey is required of the anomalies identified (potential kiln sites?) in order that consideration can be given to full excavation of one kiln.

11. References

Extract from Congresbury Tithe Map	- <i>BRO</i> 37959/9

Authors. Ian Morton and Chris Short

Date. 1st February 2010

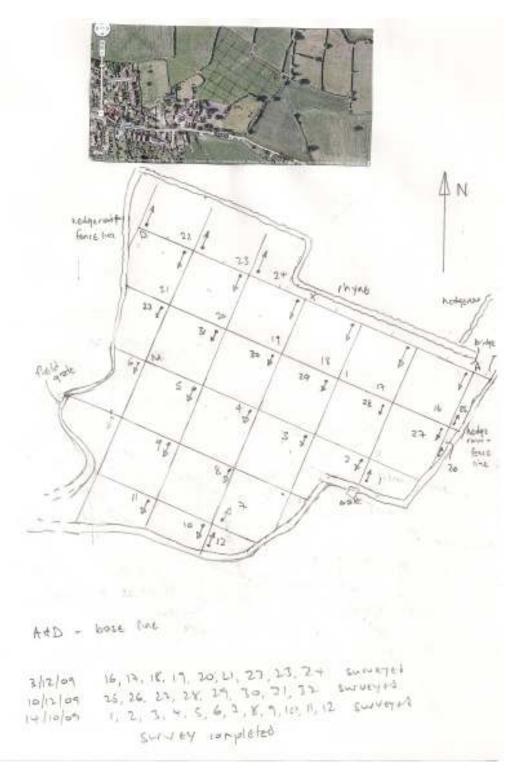
12. Appendix 1

Summary of weekly site records

YCCCART Site Survey							
Project – Congresbury Kilns							
Summary Report date	22 Dec	22 December 2009					
Type /Instrument	Grad 6	Grad 601					
	Pace :	Pace :1.5m/s Lines/m : 1		Grid size: 30m x30m			
	Range	Range:100nT		Pattern : Zig Zag			
		Volume: High Sensors:2		Samples/m:4			
	Sensor			Audio: On			
			Threshold:1nT				
				Reject:50 Hz			
Location		Street, Congresbury					
	Base lin	Base line		=			
	A	N51° 21'49" W 2° 47'47	– D	N510 012 472 NL 00 472 472			
	A	ST46 4463E 6305N		N51° 21' 47" W 2 ⁰ 47'47" ST46 4448E 6313N			
Ref	none						
Site name	Craggs	Craggs # 1					
Landowner		Mrs V Craggs					
Tenant		Ken Hutchins					
HER ref	NSHE	NSHER 47507					
Site type	Open f	Open field					
Description	Grass	Grass					
Period	Unkno	Unknown					
Geology	Carbo	Carboniferous limestone, Keuper Marl and estuarine					
	alluvium						
Land use	None	None					
Survey members	Peter H	Peter English, Peter Wright, Mike Fox, Chris Short & Ian					
-	Morton	Morton					

Survey area		No	Readings				
		Note; magnetometer display has max/min of ±100 but actual readings					
		downloaded may be greater					
		size	walk direction	max	min	mean	
	16	30 x30m	S	+27.4	-17.8	+8.0	
Grid ref #	17	30 x30m	S	+36.4	-30.7	+8.6	
Note start # was 16	18	30 x30m	S	+19.5	-0.8	+8.3	
	19	30 x30m	S	+35.0	-22.1	+8.5	
as previous surveys	20	30 x30m	S	+66.9	-24.4	+8.4	
had not been deleted	21	30 x30m	S	+100.0	-100.0	+4.4	
from gradiometer		3 lines of mirror					
C I		and return					
Date 3/12/09	22	Mirror and return	Ν	+22.5	-100.0	+5.9	
Dute 5/12/09	23	Mirror and return	Ν	+18.0	-20.9	+8.2	
	24	Mirror and return	Ν	+98.6	-47.2	+8.6	
		Incomplete grid					
	25	Part grid	Ν	+100.0	-96.7	-2.1	
		Mirror & return					
	26	Part grid	Ν	+49.1	-100.0	-2.2	
		Mirror & return					
	27	30x30m	S	+71.5	-100.0	-1.4	
Date 10/12/09	28	30x30m	S	+13.2	-21.9	+0.4	
	29	30x30m	S	+24.7	-99.7	-0.2	
	30	30x30m	S	+15.0	-13.2	-0.6	
	31	30x30m	S	+34.5	-14.7	-0.2	
	32	30x30m	S	+19.5	-100.0	-5.4	
		Mirror & return					
	1	Part grid	Ν	+98.8	-100.0	-11.8	
		Mirror & return					
2		Mirror & return	S	+8.2	-100.0	-9.3	
	3	30x30m	S	+12.8	-100.0	-3.8	
Grid ref #	4	30x30m	S	+21.8	-17.8	-3.9	
Note start # was 1 as	Note start # was 1 as 5		S	+20.0	-52.0	-3.4	
previous downloaded	6	Part grid	S	+4.5	-100.0	-6.6	
and deleted from		Mirror & return					
	7	Part grid	Ν	+35.9	-100.0	-6.0	
gradiometer		Mirror & return					
	8	30x30m	S	+28.3	-25.8	-3.9	
Date 14/12/09	9	30x30m	S	+29.4	-99.2	-4.6	
	10-	Mirror & return	S	+11.5	-100.0	-12.5	
11		Part grid	S	+100.0	-41.1	0.0	
		Mirror & return					
	12	Part grid	Ν	+5.2	-100.0	-22.5	
		Mirror & return					
Summary		Survey complete					
Ian Morton 05/01/010		Version 2					
		1					

Setting out details



12