

**WESTONBIRT ARBORETUM
GLOUCESTERSHIRE**

ARCHAEOLOGICAL EVALUATION

For

THE FORESTRY COMMISSION

CA PROJECT: 3180
CA REPORT: 10144

AUGUST 2010

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date	13 August 2010
checked by	Cliff Bateman, Project Manager
date	24 August 2010
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signed	
date	24 August 2010
issue	01

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SUMMARY

Project Name: Westonbirt Arboretum
Location: Westonbirt, Gloucestershire
NGR: NGR: ST 8520 8975
Type: Evaluation
Date: 10-12 August 2010
Location of Archive: To be deposited with Corinium Museum, Cirencester
Site Code: WBA 10

An archaeological evaluation was undertaken by Cotswold Archaeology in August 2010 at the request of the Forestry Commission at Westonbirt Arboretum, Gloucestershire. Eight trenches were excavated across the site.

No archaeological features or artefacts were identified during the course of the evaluation.

1. INTRODUCTION

- 1.1 In August 2010 Cotswold Archaeology (CA) carried out an archaeological evaluation for the Forestry Commission at Westonbirt Arboretum (centred on NGR: ST 8520 8975; Fig. 1). The Forestry Commission is seeking to undertake a Heritage Lottery Fund funded project to improve access, interpretation and visitor management at Westonbirt Arboretum, Gloucestershire. This includes the development of a new visitor car park, visitor reception building, learning centre and tree-top tower.
- 1.2 Following discussions between representatives from Atkins Ltd and Charles Parry (Senior Archaeological Officer, Gloucestershire County Council), it was agreed that evaluation of the proposed car park area should be undertaken. The evaluation was carried out in accordance with a brief for archaeological field evaluation prepared by Atkins Ltd (AL 2010a) and Gloucestershire County Council (GCC 2010), and with a subsequent detailed Written Scheme of Investigation (WSI) produced by CA (2010) that was approved by Charles Parry. The fieldwork also followed the *Standard and Guidance for Archaeological Field Evaluation* issued by the Institute for Archaeologists (2008), the *Statement of Standards and Practices Appropriate for Archaeological Fieldwork in Gloucestershire* (GCC 1995), the *Management of Archaeological Projects* (English Heritage 1991) and the *Management of Research Projects in the Historic Environment* (MORPHE): Project Manager's Guide (EH 2006).

The site

- 1.3 The proposed car park area is approximately 1.5ha, and comprises relatively flat ground under pasture. Immediately beyond the evaluation area the ground drops steeply to the south and west.
- 1.4 The underlying solid geology of the area is mapped as Great Oolite Series, Forest Marble Formation, limestone of the Middle Jurassic period (BGS 2010). The natural limestone substrate was encountered in all trenches.

Archaeological background

- 1.5 An Archaeological Desk Based Assessment undertaken by Atkins Ltd in 2010 identified no evidence of known archaeological deposits within the site or its immediate hinterland (AL 2010b).

- 1.6 Geotechnical sampling, comprising 15 test pits, was undertaken within the proposed development site in March 2010 and was monitored by an archaeologist from Atkins Heritage. This revealed topsoil to a depth of between 200-350mm, overlying mixed soil and limestone. No archaeological deposits were encountered (*ibid.*).
- 1.7 A geophysical survey undertaken in July 2010 identified a series of linear and pit like anomalies within the proposed development area (Stratascan 2010).

Archaeological objectives

- 1.8 The objectives of the evaluation are to provide data on the date, character, quality, survival and extent of the archaeological deposits within the application area in order that an informed decision on their importance in a local, regional or national context can be made. This information will clarify whether any remains are of sufficient importance to warrant consideration for preservation *in situ*, or alternatively form the basis of mitigation measures that may seek to limit damage to significant remains.

Methodology

- 1.9 The fieldwork comprised the excavation of eight trenches, each measuring 30m in length and 1.8m in width, with the exception of trench 7 which measured 50m in length and 1.8m in width (see Fig. 2 for location and extent). This constituted a 2% sample of the proposed car park area. The agreed 2% contingency trenching was not invoked.
- 1.10 The trenches were targeted either upon anomalies identified by the preceding geophysical survey, or within seemingly blank areas. The position of trench 6 was revised slightly from that agreed in the WSI due to the location of overhead power lines.
- 1.10 All trenches were excavated by mechanical excavator equipped with a toothless grading bucket. All machine excavation was undertaken under constant archaeological supervision to the top of the first significant archaeological horizon or the natural substrate, whichever was encountered first.
- 1.11 Deposits were assessed for their palaeoenvironmental potential in accordance with CA Technical Manual 2: *The Taking and Processing of Environmental and Other Samples from Archaeological Sites* (2003) and no deposits were identified that

required sampling. All artefacts recovered were processed in accordance with CA Technical Manual 3: *Treatment of Finds Immediately After Excavation* (1995).

- 1.12 The archive from the evaluation is currently held by CA at their offices in Kemble. The archive will be deposited with Corinium Museum, Cirencester. A summary of information from this project, set out within Appendix B, will be entered onto the OASIS online database of archaeological projects in Britain.

2. RESULTS (FIG. 2-4)

- 2.1 This section provides an overview of the evaluation results; detailed summaries of the recorded contexts are to be found in Appendix A.
- 2.2 No archaeological features or deposits were identified during the archaeological evaluation. A broadly similar stratigraphic sequence was identified in trenches 1, 2, 4, 5, 6, 7, and 8; this comprised natural tabular limestone brash at depths between 0.2 and 0.25m below present ground level (bpgl), which was immediately overlain by topsoil. In trench 3 a discrete horizon of subsoil, up to 0.05m thick, overlain the natural substrate and was subsequently sealed by topsoil.
- 2.3 The majority of the positive linear anomalies identified during the preceding geophysical survey were observed as clay-filled geological features, interpreted hand investigation as periglacial 'ice wedge' features and natural hollows. The weaker mottled geophysical responses correlated with a more varied geological substrate that, although predominately limestone, contained a higher proportion of clay.

3. DISCUSSION

- 3.1 No archaeological features or deposits were encountered during the archaeological evaluation, and despite the visual scanning of spoil, no artefactual material was recovered.

4. CA PROJECT TEAM

Fieldwork was undertaken by Ray Holt, assisted by Andy Loader, Jessica Cook and Martin Harrington. The report was written by Martin Harrington. The illustrations were prepared by Jon Bennett. The archive has been compiled by Martin Harrington, and prepared for deposition by James Johnson. The project was managed for CA by Laurent Coleman.

5. REFERENCES

AL (Atkins Ltd) 2010a *Brief for an Geophysical Survey and Archaeological Field Evaluation, Westonbirt Arboretum, Gloucestershire*

AL 2010b *Westonbirt Arboretum: Archaeological Desk Based Assessment*

BGS (British Geological Survey) 2010 *Geology of Britain viewer* http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html (accessed 13 August 2010)

CA (Cotswold Archaeology) 2010 *Westonbirt Arboretum, Gloucestershire: Written Scheme of Investigation for an Archaeological Evaluation*

GCC (Gloucestershire County Council) 2010 *Brief for an Geophysical Survey and Archaeological Field Evaluation, Westonbirt Arboretum, Gloucestershire*

Stratascan 2010 *Geophysical Survey Report, Westonbirt Arboretum, Gloucestershire*

APPENDIX A: CONTEXT DESCRIPTIONS

Trench 1

No.	Type	Description	Length (m)	Width (m)	Depth (m)	Spot-date
101	Layer	Topsoil			0.3	
102	Layer	Natural tabular limestone brash	n/a	n/a	n/a	

Trench 2

No.	Type	Description	Length (m)	Width (m)	Depth (m)	Spot-date
201	Layer	Topsoil			0.3	
202	Layer	Natural tabular limestone brash	n/a	n/a	n/a	

Trench 3

No.	Type	Description	Length (m)	Width (m)	Depth (m)	Spot-date
301	Layer	Topsoil			0.25	
302	Layer	Subsoil			0.05	
303	Layer	Natural tabular limestone brash	n/a	n/a	n/a	

Trench 4

No.	Type	Description	Length (m)	Width (m)	Depth (m)	Spot-date
401	Layer	Topsoil			0.3	
402	Layer	Natural tabular limestone brash	n/a	n/a	n/a	

Trench 5

No.	Type	Description	Length (m)	Width (m)	Depth (m)	Spot-date
501	Layer	Topsoil			0.35	
502	Layer	Natural tabular limestone brash	n/a	n/a	n/a	

Trench 6

No.	Type	Description	Length (m)	Width (m)	Depth (m)	Spot-date
601	Layer	Topsoil			0.2	
602	Layer	Natural tabular limestone brash	n/a	n/a	n/a	

Trench 7

No.	Type	Description	Length (m)	Width (m)	Depth (m)	Spot-date
701	Layer	Topsoil			0.2	
702	Layer	Natural tabular limestone brash	n/a	n/a	n/a	

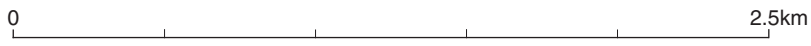
Trench 8


No.	Type	Description	Length (m)	Width (m)	Depth (m)	Spot-date
801	Layer	Topsoil			0.25	
802	Layer	Natural tabular limestone brash	n/a	n/a	n/a	

APPENDIX B: OASIS REPORT FORM



PROJECT DETAILS		
Project Name	Westonbirt Arboretum, Gloucestershire	
Short description (250 words maximum)	An archaeological evaluation was undertaken by Cotswold Archaeology in August 2010 at the request of the Forestry Commission at Westonbirt Arboretum, Gloucestershire. Eight trenches were excavated across the site. No archaeological features of artefacts were identified during the course of the evaluation.	
Project dates	10-12 August 2010	
Project type (e.g. desk-based, field evaluation etc)	Archaeological evaluation	
Previous work (reference to organisation or SMR numbers etc)	Desk-based Assessment (Atkins Ltd 2010 <i>Westonbirt Arboretum: Archaeological Desk Based Assessment</i>) Geophysical Survey (Stratascan 2010 <i>Geophysical Survey Report, Westonbirt Arboretum, Gloucestershire</i>)	
Future work	Unknown	
PROJECT LOCATION		
Site Location	Westonbirt Arboretum	
Study area (M ² /ha)	1.5ha	
Site co-ordinates (8 Fig Grid Reference)	NGR: ST 8520 8975	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project Brief originator	Atkins Ltd and Gloucestershire County Council	
Project Design (WSI) originator	Cotswold Archaeology	
Project Manager	Cliff Bateman	
Project Supervisor	Ray Holt	
PROJECT ARCHIVES		
	Intended final location of archive	Content
Physical		
Paper	Corinium Museum	Trench recording sheets, photographic registers
Digital	Corinium Museum	Digital photographs, survey data
BIBLIOGRAPHY		
CA (Cotswold Archaeology) 2010 Westonbirt Arboretum, <i>Gloucestershire: Archaeological Evaluation</i> . CA typescript report 10144		








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 COTSWOLD ARCHAEOLOGY			
PROJECT TITLE Westonbirt Arboretum Gloucestershire			
FIGURE TITLE Site location plan			
DRAWN BY	SCALE	PROJECT NO.	FIGURE NO.
LG	1:25,000@A4	3180	1



 site
 evaluation trench

-  Discrete positive anomaly - possible pit, location of a former tree or geological response
-  Magnetic disturbance associated with nearby service
-  Service
-  Positive linear anomaly - possibly geological or cut feature of possible archaeological origin
-  Positive area anomaly - possibly geological or cut feature of possible archaeological origin
-  Weak positive area anomaly - possibly geological or cut feature of possible archaeological origin
-  Weak mottled response possibly associated with tree bowls or geological response

PROJECT TITLE
 Westonbirt Arboretum
 Gloucestershire

FIGURE TITLE
Trench location plan



DRAWN BY	SCALE	PROJECT NO.	FIGURE NO.
LG	1:1000@A3	3180	2



3

3 Trench 3, looking south-west. Scales both 1m.



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

**Westonbirt Arboretum
Gloucestershire**

FIGURE TITLE

Photograph

DRAWN BY

LG

SCALE

n/a

PROJECT NO.

3180

FIGURE NO.

3



4

4 Trench 4, looking south-west. Scales both 1m.



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

Westonbirt Arboretum
Gloucestershire

FIGURE TITLE

Photograph

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FIGURE NO.

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