Long-term Data Preservation and Re-use: the work of the Archaeology Data Service

Professor Julian D Richards
Archaeology Data Service
University of York
Outline

• Political Context – Open Data

• Challenges:
  – Digital Preservation
  – Resource Discovery and Interoperability – finding & joining up fragmented and diverse data sets

• Opportunities:
  – Digital dissemination & electronic publication
13 June 2013 – European parliament ratifies new rules on Open Data - includes cultural heritage data.
2013: G8 Open Data Charter

18 June 2013: “a new era in which people can use open data to generate insights, ideas, and services to create a better world for all.”
The Five Principles

Policy paper

G8 Open Data Charter and Technical Annex

Published 18 June 2013

1. Open Data by Default
2. Increase Quality and Quantity for re-use
3. Usable by All
4. Releasing Data for improved Governance
5. Releasing Data for Innovation
The Preservation and Re-use of Archaeological Data

Outline

• Political Context

• Challenges:
  – Digital Preservation
  – Resource Discovery and Interoperability – finding & joining up fragmented and diverse data sets

• Opportunities:
  – Digital dissemination & electronic publication
Digital Data and Heritage Management

- Archaeology is **destructive**
- Concept of “preservation by record”
- Comprehensive records of field work are imperative
Digital Data and Archaeology

- Published data is limited
- Majority of data recorded in grey literature
- Data is not easily searchable
- Assess to data is difficult
Information entropy

Media Types

- Experience rapid change
Digital Data Challenges

- Fragile as the archaeological record we excavate
- Still archived as objects rather than computerised information
Case Study: NASA

- NASA sent two Viking Landers to Mars in 1975
- Data recorded on magnetic tape
- Climate controlled environment
- In the 1990s they could not decode the formats used.
- Track down old printouts and retype everything.

Photos: Courtesy NASA/JPL-Caltech
"Digital information lasts forever - or five years, whichever comes first."

(Jeff Rothenberg, RAND Corp., 1997)
Open Archival Information System (OAIS)
OAIS

Research

- Accession
- Preservation

Delivery preparation
- Interface

Release

Publish

SIP ➔ AIP ➔ Deep Storage ➔ Nearline backup ➔ Delivery system ➔ DIP

Picture from DLib
The Archaeology Data Service

- Set up in 1996
- Based within the University of York
- 15 staff
- Business model based upon charging policy
- Data Seal of Approval
- Received Digital Preservation Coalition’s Decennial Award in 2012
- Feb 2016: 10Tb; 2,054,846 files; 18,505 recorded processes
The Archaeology Data Service

“Supporting research, learning and teaching with free, high quality and dependable digital resources”

- Collects and preserves datasets
- Provides easy and free access to datasets
- Provides guidance and support to data creators

15/05/2019

http://archaeologydataservice.ac.uk
...the archaeological record could be decaying faster in its digital form than it ever did in the ground

...the Newham case study

**Archive:**
- 6432 individual files
- 1500 excavation reports
- 700 database files
- 1200 geophysics files
- 200 separate projects
- approx. 150 excavations

**Lessons:**
- Physical Media not the main problem
- Software problems (migration)
- Data to information (documentation)
- Plan for re-use
- Forward planning is much cheaper
- Preservation from the outset
The Preservation and Re-use of Archaeological Data

Guides to Good Practice

- GIS
- CAD
- Geophysics
- AP and Remote Sensing
- Excavation and Fieldwork
- Virtual Reality

This new and revised series of Guides to Good Practice have been produced as the result of a two-year collaborative project between the UK Archaeology Data Service and Digital Antiquity in the US. The project has encompassed important revisions of the existing six ADS Guides as well as the development of entirely new documents covering areas such as marine survey, laser scanning, close-range photogrammetry, digital audio and digital video. The project has involved previous Guides authors revising existing content alongside new authors, from both Europe and the US, also contributing to the development of the guides into new themes and areas.

The project has been undertaken in collaboration with the Digital Antiquity Initiative, a US-based project with the aim of enhancing the preservation of and access to digital records of archaeological investigations. A major aim of the Guides is to provide the basis for archaeological project workflows that will create digital datasets that can be archived and shared effectively by Digital Antiquity’s tDAR archive and repository in the US and by the Archaeology Data Service in the UK. The development of the Guides involves close collaboration with teams in the US at both the University of Arkansas and Arizona State University.

Other ADS projects have also fed into the revision and development of the Guides. ADS involvement in the European VENUS project has formed the basis of a guide focused on marine surveys. In addition, the incorporation of findings from the ADS Big Data project, together with the revision of the existing guide on aerial photography and remote sensing data, has seen a significant contribution to the guides from English Heritage funded projects.

Previous versions of the ADS/AHDS Guides to Good Practice have been archived and are still available on the old Guides to Good Practice page.

View the full new Guides to Good Practice Table of Contents

http://archaeologydataservice.ac.uk
Preservation Intervention Point Schema

Example of preservation meta for e.g. Sonar survey

PIP requisites/criteria
1 Metadata - preservation
2 Metadata - resource discovery
3 Re-use case - known
4 Re-use case - potential
5 Repeatability and value

Data streams

‘In-device’ processing

‘In-field’ processing

Post-processing

Dissemination outputs

Preservation Intervention Point (PIP)
Non exclusive.

Acquisition feedback

Data archive (OAIS)
The Preservation and Re-use of Archaeological Data

Outline

• Challenges:
  – Digital Preservation
  – Resource discovery & Interoperability

• Opportunities:
  – Digital dissemination & electronic publication
My lithics report here, on floppy disc
The Preservation and Re-use of Archaeological Data

ADS Website

Welcome to the new ADS website. There are a number of new features of the website that will make it easier and more enjoyable to use. To register as an ADS user to take full advantage of these features, please follow the link to http://archaeologydataservice.ac.uk.

Featured collection
Hilton of Cadboll

The Hilton of Cadboll Pictish cross-slab is thought to have been erected at the Chapel site in the late 9th century AD and, after having been taken to London to have been re-sited there in the 19th century, it is thought to have fallen in a stone and one side was detached and re-erected with a memorial in the 19th century, leaving the fragments of the Pictish cross and the lower portion in situ. Many thousands of carved fragments and the lower portion of the cross slab were removed from the site during excavations in 1998 and 2001. The aim of the excavations was to achieve all the excavators to assess the potential of the finds, and record their location in the nearest grid square in the field that they would fit the reconstruction of the whole cross face. All fragments have been catalogued and photographed and made available to the public.

Notice
We are currently conducting a Beta testing program where registration is temporarily required to access this site, just click the LOGIN button at the top right to register. It is important to read the terms of this beta test notice on the ADS website after logging in. Please contact the ADS Helpdesk if you require further information regarding this or future beta testing programs.

We use Firefox browser for development testing and don't recommend using any other browsers during the beta testing period.

To access our current website, please follow this link:
http://archaeologydataservice.ac.uk

Workbook
Using the tools at the bottom of each page save your favourite resources and regular searches in the myADS Workbook.

History
Your recent exploration of the site and the archives is automatically saved in your myADS History.

November 2019: Grey Literature library reaches 7,000 reports.
The ADS is pleased to announce that the recent addition of over 700 new reports to the online library of grey literature brings the total number available for download to 7,000! The new releases include some 150 reports from Durham County Council Archaeological Service, 48 from Thames Valley Archaeological Services, 33 from North Pennines Archaeology Ltd and 19 reports from ADC Archaeology Group...

October 2019: ARCHER2 demos video now available.
The ADS is pleased to announce the release of the Archaeological Record of Europe: Networked Access (ARENA 2) demonstration video. The original ARENA portal has now been running for over 10 years and is known as more sophisticated approach to the interoperability. Under the auspices of both the European funded DARPA and ACE projects...

October 2019: Limestone Cragmark Landscape archives released.
The ADS and English Heritage are pleased to announce the release of the Archaeological Cragmark Landscapes of the Magnesian Limestone project archive by Ian Roberts, David Bang and Alison Deepson. The project, funded by the Aggregate Levy Sustainability Fund between March 2005 and March 2007, was designed to investigate the prehistoric and Roman-British archaeological landscapes of the eastern...
ArchSearch

Allows users to search by key words: “Type and Hope”
ArchSearch

Facetted browse of 1.3 million records
ArchSearch

Narrow results by facets
ArchSearch

Search by location
National Preservation Infrastructures
Netherlands: eDNA

- 2004-6 pilot study – DANS & Leiden University
- 2007 eDNA
- 2 members of staff, plus DANS infrastructure
- 2015 – 20,000+ fieldwork reports
Sweden: SND

- Swedish National Data Service, University of Gothenburg
- 2012 first archaeological archives, in collaboration with Uppsala University – GIS files, Östergötland
- Swedish Rock Art archives
Germany: IANUS

- 2012 – DAI scoping project
- Initial staff of two
- 2015 – Implementation phase – now 4 staff
United States: tDAR

- 2009+
- Mellon start-up grant
- Based Arizona State University
- Digital Antiquity consortium
- 6 staff members
Hungary

- No official national digital repository as yet
- 2016: 1700+ sites on line via ARIADNE - all metadata translated into English
- Includes grey literature, CAD drawings, digital photos, drawings, spreadsheets, database tables, GIS, 3D models etc
- Uses Hungarian National Museum protocols
ARIADNE brings together and integrates existing archaeological research data infrastructures so that researchers can use the various distributed datasets and new and powerful technologies as an integral component of the archaeological research methodology. There is now a large availability of archaeological digital datasets that, together, span different periods, domains and regions; more are continuously created as a result of the increasing use of IT. These are the accumulated outcome of the research of individuals, teams and institutions, but form a vast and fragmented corpus and their potential has been constrained by difficult access and non-homogenous perspectives.
Welcome
ARIADNE brings together and integrates existing archaeological research data infrastructures so that researchers can use the various distributed datasets and new and powerful technologies as an integral component of the archaeological research methodology.
Ariadne Search Map

Search

Age
Select Some Options

Period
Select Some Options

Sub-period
Select Some Options

Culture
Select Some Options

Phase
Select Some Options

We found 1697 results.

Map

List

Extended search

Search

Name
Somogyvár, Besliahegy alja
Archeologist
Stibrányi Máté, Nemes György
Institution
Magyar Nemzeti Múzeum (Budapest)
Outline

• Challenges:
  – Digital Preservation
  – Resource discovery & Interoperability

• Opportunities:
  – Digital dissemination & electronic publication
ADS Archsearch

Several thousand “thick” archives:
- 35000+ grey literature reports+
- 10000’s of articles and complete publications
- 800 or so digital research archives and supporting material (growing rapidly)

1,300,000 “thin” records:
- basic site information
- links to other data sources

Catalogue Records

- site digital archive
- other digital data
- Contact details and reference numbers
Grey literature library

- 35,000+ reports
- Research Gap
- Public excluded
- Citation
Unpublished Fieldwork Reports (Grey Literature Library)

Details of Document

Bibliographic Reference and files


Click on a button to open a file, or right click and use file --> save as from your browser menu to save the file to your computer. Alternatively, if the report is available online, click on the link to open the resource in a new window:

oxfordar2-35728_1.pdf

PDF 1013 Kb

<< display document details >>

Site details

Location

Site name The Limes, Ribchester
Parish RIBCHESTER
District RIBBLE VALLEY
County LANCASHIRE
Country ENGLAND
Grid reference SD 65861 35410 (point)

Monuments and Finds

Other details

Description A4 Document
Associated Identifier oxfordar2-35728

Primary contact

Archaeology Data Service
King's Manor
Exhibition Square
York
YO1 7EP
England
Tel: 01904 323954
Fax: 01904 323939

Send e-mail enquiry

University of York legal statements I ADS terms and conditions I Sitemap
The Preservation and Re-use of Archaeological Data
Introduction
Framework Archaeology is a Joint Venture agreement between Oxford Archaeology (OA) and Wessex Archaeology (WA) to provide archaeological services to BAA. Given the potential scale of some of BAA's projects, the joint venture enables Framework Archaeology to draw on the full resources of both OA and WA, including site staff, specialist managers, administrative support, and technical facilities. This combination of resources (totalling over 300 staff) considerably reduces risk for both our client and us, and provides Framework Archaeology with a wider skills base.

Framework Archaeology is committed to a particular archaeological philosophy developed by BAA's archaeological consultants, Gill Andrews and John Barrett. This is concerned with understanding how people inhabited past landscapes: archaeology as a study of people rather than deposits or objects. This approach is at the heart of the Archaeological Policy adopted by the BAA Main Board. Framework projects are thus academically driven but undertaken within a commercial environment. In order to fulfil the approach a Framework Archaeology recording system has been developed and is now in operation on all Framework Projects. It places great emphasis on interpretation in addition to recording, and developing a historical narrative as the site is excavated (Andrews, Barrett &
Lower Palaeolithic technology, raw material and population ecology
Gilbert Marshall, David Dupplaw, Derek Roe, Clive Gamble, 2002

Introduction
Overview
Query

Records 1 - 20 of 256
Pages: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120

Click on the images or the links below to view more details for each biface.

IRREGULAR QUARTZITE HANDAXE (344g)
Location: OLDUVAI GORGE TANZANIA
Museum: NATIONAL MUSEUM, DAR ES SALAAM, TANZANIA

IRREGULAR QUARTZITE HANDAXE (480g)
Location: OLDUVAI GORGE TANZANIA
Museum: NATIONAL MUSEUM, DAR ES SALAAM, TANZANIA

IRREGULAR QUARTZITE HANDAXE (763g)
Location: OLDUVAI GORGE TANZANIA
Museum: NATIONAL MUSEUM, DAR ES SALAAM, TANZANIA

IRREGULAR QUARTZITE HANDAXE (404g)
Location: OLDUVAI GORGE TANZANIA
Museum: NATIONAL MUSEUM, DAR ES SALAAM, TANZANIA

Primary contact
Dr Gilbert Marshall
Department of Geography
Royal Holloway, University of London
Egham
Surrey
TW20 0EX
England
Tel: +44 1784 443569

Resource identifiers
ADS Collection: 349
doi:10.5284/1000354
How to cite using this DOI

Send e-mail enquiry
Defence of Britain Archive
Council for British Archaeology, 2002 (updated 2006)

Introduction
Overview
Download
Gallery
Search
Project homepage

Data copyright © Council for British Archaeology unless otherwise stated

Shell-proof type 24 pillbox.
(Source: Book 1999)
Brick-shuttered type 24 pillbox at edge of wood. With attached porch/blast wall. Faces SW. In excellent condition. Internal access possible. A short spur of anti-tank ditch leads up to this pillbox [see UORN 8552]. Five iron picket posts are still in place in the bank on the N side of the pillbox.
(Source: Field Visit 2003/02/05)

Type of site
PILLBOX (TYPE FW3/24)

Location
At S corner of Hog Wood.

Area
Hinton Charterhouse, Bath and North East Somerset, England

Grid reference
ST 7741 5944

Period
WW2

Condition
Good

Materials
Clay Brick, Reinforced Concrete

Recorder
Foot, William (English Heritage Defence Areas Project)

Defence grouping
GHQ Line: Green - Stop Line - Burnham on Sea to near Melksham (where it joins with the GHQ Line: Blue) and then north to the River Severn at Newnham. This line is also known as the Bristol Outer Line. Manned by VIII Corps.

Photographs

DOB site reference:
S0008550

Reference
1999 Ironside's Line
1999 Warwalks: Stop Line Green

Event
Construction, in the period 1940-1941
<table>
<thead>
<tr>
<th>TITLE</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Körös culture settlement, subsistence and environment: investigations of the Early Neolithic at Körös culture site of Eszsrfa 23, Co. Békés, Hungary</td>
<td>2008</td>
</tr>
<tr>
<td>The Upper Tisza Project 1991-2004</td>
<td>2006</td>
</tr>
</tbody>
</table>

**WHERE:** Hungary

**EVENT:** (2)

**OBJECT:** (1)

**MONUMENT:** (2)

**PREHISTORIC:** (1)

**ROMAN:** (1)

**MEDIEVAL:** (1)

**POST MEDIEVAL:** (1)

**CONTINENTAL EUROPE:** (2)

**HUNGARY:** (2)

**FUNDER:** (2)
Digital Archives

Digital Object Identifiers (DOIs)
Körös culture settlement, subsistence and environment: investigations of the Early Neolithic Körös culture site of Ecsegfalva 23, Co. Békés, Hungary
Alasdair Whittle, 2008

Usage statistics

If a visitor comes to the website for the first time, or if they visit a page (or download a file) more than 30 minutes after their last page view, this will be recorded as a new visit. A unique visitor making multiple visits per day will register as several visits.

A download is a click on a link to something other than a web page. File extensions include: csv, doc, docx, gif, jar, jpeg, jpg, mp3, mp4, mov, odf, odt, pdf, png, ppt, pptx, txt, wav, wma, wmv, wps, xls, xlsx, xml, zip but this is not an exhaustive list.

Pages viewed is the number of HTML pages or scripts that visitors have looked at. A "page" is a hit that is not an image, JavaScript or CSS file and which was not loaded by a search engine robot.
Internet Archaeology has been publishing on the web since 1996 and is the premier e-journal for archaeology. An independent, not-for-profit journal, it publishes quality academic content and explores the potential of electronic publication through the inclusion of video, audio, searchable data sets, full-colour images, visualisations, animations and interactive mapping. Internet Archaeology is international in scope, a true journal without borders, and all content is subject to rigorous peer-review. Internet Archaeology is hosted by the Department of Archaeology at the University of York. All content is fully archived by the Archaeology Data Service. Internet Archaeology is an Open Access e-journal.
LEAP: Linking Electronic archives and publications

The aim of the project is to investigate novel ways in which electronic publication over the Internet can provide broad access to research findings in the arts and humanities, and can also make underlying data available in such a way so that readers are enabled to 'drill down' seamlessly into online archives to test interpretations and develop their own conclusions.


"Making the LEAP" is funded by the Arts and Humanities Research Council (AHRC) under the ICT Strategy Programme.

© ADS / Internet Archaeology 2005
Last updated Tuesday, 22 September 2009 by Jo Gilham
Cite only: http://ads.ahds.ac.uk/project/leap/index.html for this page
The Urban Landscapes of Ancient Merv, Turkmenistan
Tim Williams, Sjef van der Linde, 2008

Introduction
Ancient Merv, in Turkmenistan, is one of the most complex and well-preserved urban centres on the Silk Routes of Central Asia. A succession of major cities at Merv started in the 6th century BC and continued until the Mongol sack of 1221AD, although Mongol occupation, a resurgent Timurid city of the 15th century, and expansion in the 16th century continues the urban sequence. Together the walled urban areas covered more than 1000 ha.

The Institute of Archaeology, University College London, has had a long collaboration with the Turkmenistan Ministry of Culture, focused on archaeological research and approaches in the conservation and management of the Ancient Merv Archaeological Park, which since 1990 has been a World Heritage Site.

The collection of monumental photographs (dating from 1890 onwards) was first compiled by Georgina Herrmann, former director of the International Merv Project, who published some of them in "Monuments of Merv: Traditional Buildings of the Karakum"1. In 2002 an expanded version of the photographic collection was published in "The Monuments of Merv: A scanned archive of photographs and plans"2, which included a CD-ROM with low resolution digital versions of the photographs. Since 2001 the Ancient Merv Project has added new images of the monuments, showing their current condition and conservation work, and more detailed metadata for the photographs has been assembled. More information on the Ancient Merv Project can be found at the [UCL website](http://archaeologydataservice.ac.uk).

This digital archive was undertaken in conjunction with an electronic publication through the Linking Electronic Archives and Publications (LEAP) project. The corresponding article is "The urban landscapes of Ancient Merv, Turkmenistan: Where to draw the line?" by Tim Williams & Sjef van der Linde, which can be found in *Internet Archaeology* 25.


---

The landscapes of Islamic Merv, Turkmenistan: Where to draw the line?
Tim Williams

Institute of Archaeology, University College London, 33-34 Gordon Square, London WC1H 0PY. Email: tim.williams@ucl.ac.uk

Summary

This article outlines approaches for interpreting the Islamic city of Sultan Kala (Merv), c. 8th-13th centuries AD, based upon aerial photographic and satellite imagery. Hierarchies of assumptions (identification of individual wall lines; which frame spaces, rooms and courtyards; which are grouped as parts of specific buildings; which are part of urban blocks) and ontologies (information about these assumptions and the variable confidence of interpretation, from the position of lines to spatial function) provide a dynamic structure for the presentation of data, interpretation and theory.

The article establishes procedures and protocols within two sample areas (selected to represent the diverse features of the urban and suburban landscapes) to:

- Explore the theory and methodology of documenting interpretation (and uncertainty) in the transcription of aerial photographic and satellite imagery
- Develop ontological approaches to structuring interpretations and assumptions, within a hermeneutic model
- Provide a textual and graphic narrative of the development of the areas
- Establish an online forum (weblog) to contribute to the long-term project

Go to article Table of Contents

Features

This article will appeal to: those interested in the presentation of data, interpretation and theory

Keywords: Merv; Silk Route; Turkmenistan; interpretation; uncertainty; aerial photographs; satellite

Find more publications on the Silk Route in the British and Irish Archaeological Bibliography (BIAB)

NEXT CONTENTS HOME COMMENTS
3. A short introduction to the city of Sultan Kala

With the coming of Islam, in the 7th century AD, Merv became the capital of Khurasan (the ‘eastern land’) (for an overview of the history see Kennedy 1999; Williams forthcoming). In the 740s the Abbasid revolution began here, and while Baghdad was established as the capital of the new empire, Merv’s status grew, as the capital of Khurasan, from east of the Great Desert to the frontiers of India. In the same decade, the governor, Abu Muslim, commissioned a mosque to be built alongside the Mjidan Canal, which flowed about a kilometre to the west of the old city of Gyar Kala. Thus began the new city of Merv al-Shahrian (Merv the great today Sultan Kala) (Fig. 2 - opens GIS). It is tempting to see the mosque as part of the planning for the heart of the new city, and by the 9th century it lay at the centre of a thriving metropolis. The city was planned, with a street system and a carefully managed water supply with numerous canals and reservoirs in each district (Williams forthcoming). It seems likely that the new status of Merv, coupled with new ideas and beliefs that identified the need for public
Burdale: An Anglian Settlement in the Yorkshire Wolds (Data Paper)

Julian D Richards* and Steve Roskams*

*Department of Archaeology, University of York, UK. julian.richards@york.ac.uk (0000-0002-3938-699X) / steve.roskams@york.ac.uk


Dataset Location

This dataset has been deposited with the Archaeology Data Service. doi: 10.5284/1021540

Referee

Referee statement by Gabor Thomas

Dataset Content

The Burdale digital archive (Richards and Roskams 2013) comprises a broad range of primary and secondary data derived from fieldwork and post-exavcation analysis. It complements the summary report published as Richards and Roskams (2012).

Full stratigraphic reports are downloadable for each season of excavation and can be related to the sequence of CAD plans also available. These can, in turn, be set within the wider site map derived from aerial photography and geophysical survey. Final reports are available for the pottery, spindlewhors, and worked bone and antler (Ashby 2013). Other finds are simply listed in the finds databases, split by excavation year, with some preliminary notes on the ironwork included in the investigative conservation reports. The non-ferrous finds assemblage was largely missing, apart from a small number of topsoil finds recovered during metal detector surveys. Given the alleged wealth of the site, and the interest in it from 'nighthawks' we have to assume that unfortunately, most of the coinage and copper alloy metalwork has been collected from the ploughsoil over many years and is in private hands or has been sold for profit. In common with other Yorkshire sites Burdale produced very little early medieval pottery but this is likely to be a real absence rather than a product of recovery bias. The animal bone assemblage (Richardson 2010) is one of the most important elements of the archive. Over 300 images are also presented, split by year of excavation.

The file downloads are organised in 3 groups: those relating to the whole project and those specifically related to excavations in 2006 (BUR06) or 2007 (BUR07).
Transparent refereeing

Figure 6: The Burdale project: a team effort!

Acknowledgements

On-site direction was undertaken by Steve Roskams, with additional supervision by Madeleine Hummler, Steve Dobson and Ben Gourley. Initial interest in the site was prompted by Cath Neal’s doctoral research. Metal detecting support was provided by Mark Ainsley, Geoff Bambrook, Ian Postlethwaite, and colleagues in Historia Detectum. Michael Chamo, Eric Thurston and Thomas Mountain provided CAD support. Mags Felter and Ian Panter at York Archaeological Trust undertook the finds conservation, and Tony Austin and Elizabeth Jelley catalogued the finds. Eleanor Blakeley examined the ironwork, and Steve Ashby the bone and antlerwork. Permission to carry out the fieldwork was granted by Lester Bell, tenant farmer, and by the landowner, the Right Honourable Michael Willoughby (now Lord Middleton) and the Birdsall Estate Company.

Funding

The fieldwork at Burdale was undertaken as part of University of York training excavations and was funded by the University of York.

Referee Statement

Gabor Thomas, Department of Archaeology, University of Reading, UK.


The site of Burdale on the Yorkshire Wolds lies within one of the most intensively investigated archaeological landscapes in northern England. In the immediate catchment can be found the internationally important sites of Wharram Percy and West Heslerton, augmented by a cluster of other settlements identified through aerial reconnaissance and metal-detecting of which Cottam and Cowiam have previously been investigated under the ambit of the same University of York project targeting Anglian settlement on the Yorkshire Wolds. The importance of the dataset thus lies in its contribution to a broader programme of research whose cumulative results have the potential to generate something approaching a holistic view of landscape change in an English micro-region over the first millennium AD.
The Preservation and Re-use of Archaeological Data

Who is Using the ADS?

- Education: 42%
- Commercial: 29%
- Nat/Local Gov.: 12%
- Independent: 9%
- Metal Detector: 5%
- Museums: 3%
The Preservation and Re-use of Archaeological Data

Primary re-use of data

- Academic Research: 38%
- Private Research: 19%
- Commercial research: 8%
- Family History: 1%
- Heritage management: 11%
- General Interest: 17%
- Teaching and Learning: 6%
Investment Return over 30 years?
Increase in returns on investment in data and related infrastructure arising from additional use facilitated by ADS

£1 investment provides up to £8.30 return
Thank-you for listening

Follow us on Twitter:
@ADS_Update

Follow us on Facebook:
http://www.facebook.com/archaeology.data.service

E-mail: julian.richards@york.ac.uk
Website: http://archaeologydatascience.ac.uk/