

# Open Data: Data preservation Data citation



**DPC 'Open Data' Day  
5th July 2013, York**

# G8 Open Data Charter unveiled



Picture: FACUNDO ARRIZABALAGA/EPA

# We're all in the same boat!



Picture: AFP/GETTY

# The Five Principles

Policy paper

## G8 Open Data Charter and Technical Annex

Published 18 June 2013

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1. Open Data by Default
2. Quality and Quantity
3. Usable by All
4. Releasing Data for improved Governance
5. Releasing Data for Innovation

# ADS: Who we are and what we do (in a nutshell)

- Accredited digital archive for archaeological data
- Established in 1997, hosted by the University of York
- Cross-sectoral work from professors to the public

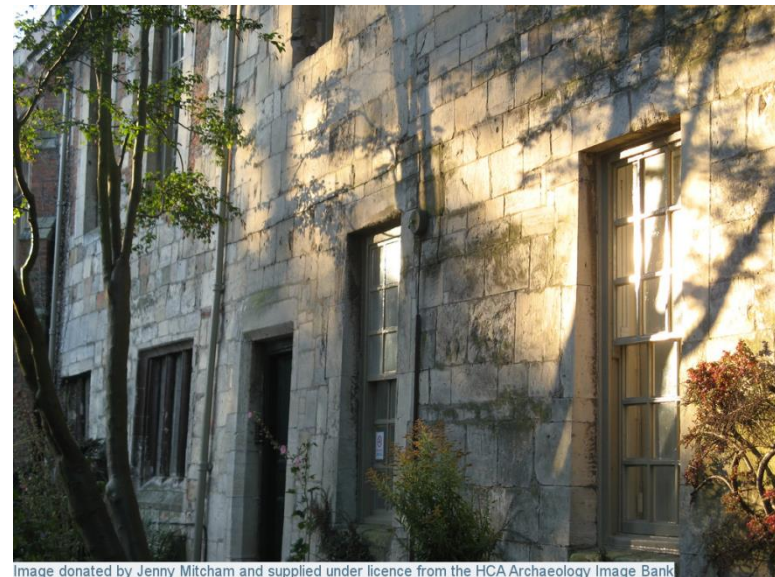


Image donated by Jenny Mitcham and supplied under licence from the HCA Archaeology Image Bank

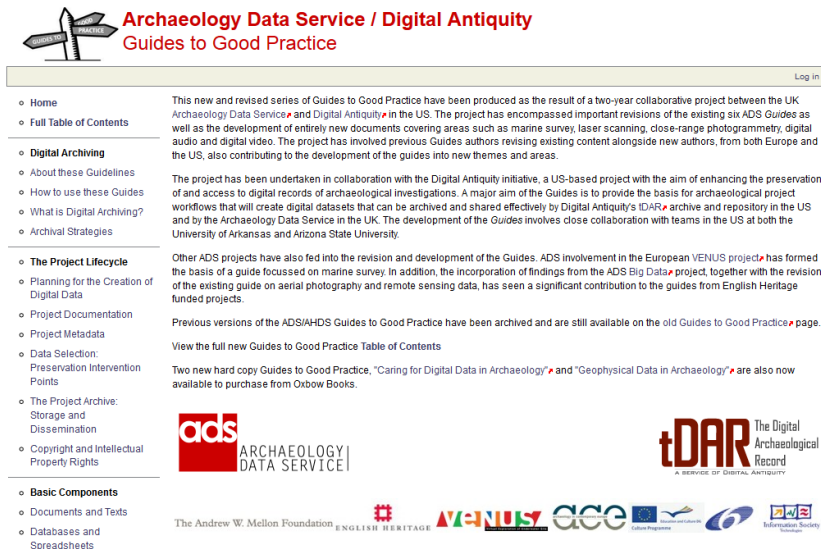
# Open Data by Default

- (Almost) all ADS hosted data is 'Open', i.e. openly accessible
- Licenced to be reused (excluding commercial use)
- Embargoes; need to have a good reason
- Freedom of Information and the Data Protection Act
- RCUK expectations

# Quality and Quantity

- Supporting research, learning and teaching with free, high quality and dependable digital resources
- ...and many of them
- The more you have the more potential they have

# Useable by All



**Archaeology Data Service / Digital Antiquity  
Guides to Good Practice**

Log in

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- Digital Archiving**
  - About these Guidelines
  - How to use these Guides
  - What is Digital Archiving?
  - Archival Strategies
- The Project Lifecycle**
  - Planning for the Creation of Digital Data
  - Project Documentation
  - Project Metadata
  - Data Selection: Preservation Intervention Points
  - The Project Archive: Storage and Dissemination
  - Copyright and Intellectual Property Rights
- Basic Components**
  - Documents and Texts
  - Databases and Spreadsheets

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 IDAR 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 focussed on marine survey. 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/ADS 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

Two new hard copy Guides to Good Practice, "Caring for Digital Data in Archaeology" and "Geophysical Data in Archaeology" are also now available to purchase from Oxbow Books.

ads ARCHAEOLOGY DATA SERVICE

tDAR The Digital Archaeological Record  
A SERVICE OF DIGITAL ANTIQUITY

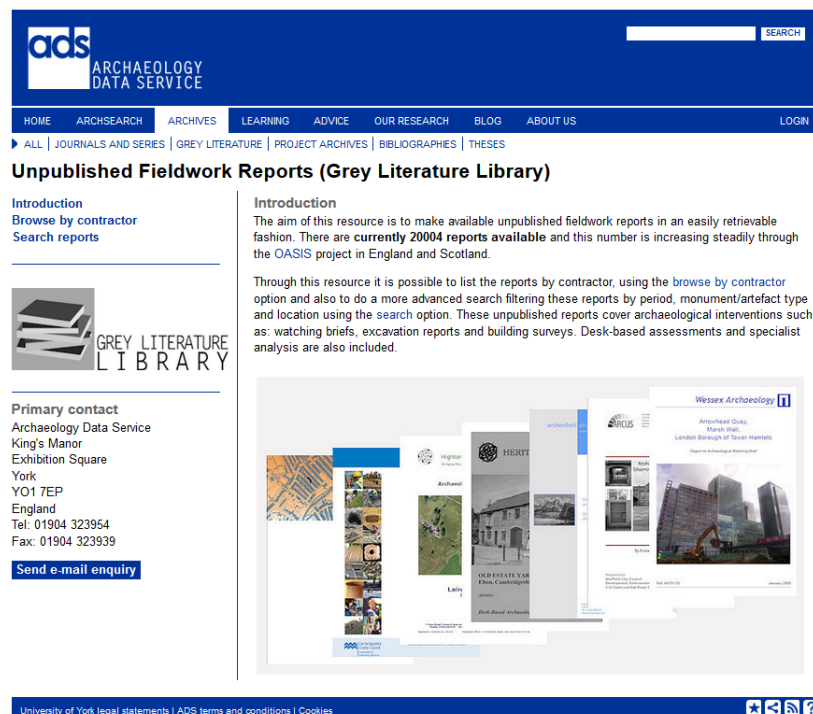
The Andrew W. Mellon Foundation ENGLISH HERITAGE VENUS ADOE European Commission European Society

- Non-proprietary formats
- Accessible online to download
- Free
- Instructions for use
- Advice and guidance



# Releasing Data for Improved Governance

- OASIS and an online archive of grey literature
- Work with national bodies, local planning authorities, museum services



# Releasing Data for Innovation



JISC

Data centres: their use, value and impact

A Research Information Network report

September 2011

Figure 23: Research efficiency benefits, by data centre

Benefit	ADS	BADC	CDS	ESDS	NGDC
It has reduced the time required for data acquisition / processing	79%	68%	76%	80%	92%
N=	67	618	174	262	36
It has improved the efficiency of research	79%	62%	75%	67%	89%
N=	67	622	179	261	36
It has reduced the financial cost of data acquisition / processing	65%	62%	61%	73%	78%
N=	66	612	175	262	36
It has reduced duplication of effort (i.e. unnecessary recreation of data)	57%	57%	68%	62%	81%
N=	65	609	176	258	36
It has enabled me to undertake a greater quantity of research	52%	42%	50%	54%	77%
N=	63	614	176	257	35

Correlating  
radiocarbon  
dating and  
collagen  
degradation in  
dinosaur bones:  
Prof Matthew  
Collins

Source: Technopolis survey of data centre users, January 2010

# Practicalities: Data Preservation

- How do we ensure the longevity of this ‘open Data’
- Not very ‘Open’ if it’s not there in 10 years (if it needs to be)
- Not very ‘Open’ is you can’t reuse it
- Metadata requirements and file formats
- Active, long-term management, planning for the future

# Practicalities: Data Citation

- How do we know this is useful?
- Digital Object Identifiers (DOIs)
- DataCite and the British Library

## Star Carr Archives Project Nicky Milner, Hayley Saul, Ben Elliott, 2013

[Introduction](#)  
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### Resource identifiers

**ADS Collection:** 1335  
**doi:** 10.5284/1019856  
[How to cite using this DOI](#)

### Introduction

Star Carr is an internationally renowned, Early Mesolithic site in the Vale of Pickering, North Yorkshire. It was first discovered by a local amateur archaeologist, John Moore, but became known worldwide after the excavations of Professor Grahame Clark, 1949-1951, due to the well preserved, rare artefacts which were uncovered. More recent excavations by the Vale of Pickering Research Trust (in the 1980s and since 2004), have led to further important discoveries such as a timber platform (the earliest evidence of carpentry in Europe) and a structure (the earliest known "house" in Britain).



One of the biggest stumbling blocks to conducting further research is access to the archive from the earlier excavations. Moore's paper archive is missing. There is no known paper archive from Clark's excavations and it is thought that all records must have been destroyed once the monograph (Clark 1954) had been published. The only surviving records are some of the photographic slides which are held in the Museum of Archaeology and Anthropology, Cambridge (MAA) and a small number held by Scarborough Archaeology and Historical Society. In addition, Clark's excavated assemblage has been dispersed across many museums and there is no over-arching catalogue. The paper archive for the Vale of Pickering Research Trust is being collated by Paul Lane (University of York), but some of the finds from the 1980s have not been found.

Given these problems, it should be no surprise that it has been difficult for recent scholars studying the site of Star Carr to locate all the finds. Due to the current interest in Star Carr by a range of stakeholders, English Heritage agreed to fund a period of 'archive mapping' with the primary aims of locating and cataloguing as much of the material as possible to enable further research (as part of the project: Star Carr: Excavation to inform management, project 6064 ANL).

The outcomes of the project aimed:

- To produce copies of catalogues and finding aids of museums and universities holding finds, artefacts and archives relating to the site;
- To produce lists of contacts at each institution and clear instructions as to how future researchers can access the material;
- To assess how/when/where Star Carr material has been exhibited as well as stored and researched;

# Are we going in the same direction?



Picture: AFP/GETTY

# Are we doing this because we have to?

- ... or because it's a good thing.
- The IMPACT project to develop and refine a range of methods to measure the costs, benefits, economic impacts and value of the ADS



# Is it worth it?



Increase in returns on investment over 30 years :  
£1 investment provides up to £8.30 return