Deposition: costing, best practice and practical advice

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Introduction

• A short introduction to the cost of data preservation. (Discussion and questions)
• Guidance and best practice on formats and metadata. (Discussion and questions)
• Depositing: Using ADS-easy: a practical guide. (Discussion and questions)
• The future: the development of OASIS. (Discussion and questions)

https://archaeologydataservice.ac.uk/learning/DevonWorkshop2019.xhtml
A short introduction to costing: how to obtain the right costing for your work.
Why bother depositing data?

1. Ensure preservation
2. Provide access
3. Professional recognition
4. Follow professional standards
5. Meet governmental/local authority requirements
6. Meet funding agency requirements
Depositing with the Archaeology Data Service

• Set up in 1996
• Based within the University of York
• Trusted repository with over 20 years dealing with outputs of archaeological projects
• Working with the wider digital archiving community, particularly DPC and DCC
• Data Seal of Approval 2010, renewed in 2013 when the 2014-15 standard, but also investigating other forms of accreditation
• Working closely with the CIFA Archaeological Archives Group, Geophysics Special Interest Group and other agencies and organisations to raise the profile of digital archiving
• Creating and setting standards e.g. Guides to Good Practice
Depositing with the ADS

**Aim:** To create the flexibility necessary to legislate for differences in workflows, technological experience and infrastructure, and for all budgets in order to facilitate the deposition of data for individuals and organisations. Deposition streams:

- ‘Traditional’ deposition: for all/large datasets
- ADS-easy: for small/medium archives
- OASIS Images: for small image only archives
- OASIS: for fieldwork reports

http://archaeologydataservice.ac.uk
OASIS

“The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork and a similar increase in fieldwork undertaken by volunteers”.

Also...

- on-line form used to record event level metadata for fieldwork
- powering online indexes e.g. ArchSearch, Heritage Gateway, etc.
- allowing reports to be shared for validation with HERs & NMRs
- allowing reports to be preserved by the ADS
- allowing reports to be disseminated for wider consumption through the ADS Library
- All this for FREE!
OASIS Images

- An additional part of OASIS allowing depositors completing an OASIS form to include a set of images from their project
- Uses the ADS-easy system
- Allows you to upload **up to 150 images** and metadata using the ADS-easy service.
- Uses the same metadata spreadsheet available through the ADS’ [Guidelines for Depositors](http://archaeologydataservice.ac.uk)

- A fixed-price service which costs £150+VAT per image collection
ADS-easy

Used for small/medium archives:

- depositions that include certain data types (but not all the data types that the ADS accepts)
  - databases
  - documents and reports
  - Geophysics
  - GIS
  - maps and plans
  - photographs and images
  - spreadsheets
- files found in the list of accepted formats
- files with a maximum size of 100MB
- deposits with a maximum of 1000 files
- a geophysical survey of less than 50Ha

Take a look: https://archaeologydataservice.ac.uk/easy/
‘Traditional’ deposition

Used for archives of all sizes

- typically involves the electronic exchange of data outside of ADS-easy, or the physical movement of data
- ‘low tech’ approaches are sometimes the most successful
- allows the submission of all data types
  - including movies, audio, LiDAR, 3D models, etc.
- files found in the list of accepted formats
- no maximum file size
- no maximum deposit size
- works well within some workflows, although more expensive
Find the right deposition route for your workflow and the data that you have created

Still unsure... just contact us
Costing and charging – know the options

- OASIS – is a free service
- OASIS Images – costs £150 (exc VAT)
- ADS-easy – costs vary according to content
  - think about selection and retention
  - the [costing calculator](#) allows you to plan ahead for preservation and create estimates accordingly
  - how to use the calculator
  - download the estimate
  - these costings are not saved
- ‘Bespoke’ costing – for complex and submissions through ‘traditional’ means
  - think about selection and retention
  - [contact us](#)
  - these details are documented and formerly acknowledged
Balancing the cost – how we charge

- the basis of an ADS costing is the individual file (except for geophysics)
  - this allows granularity for each costing
  - the charge for individual files is based on the nature and complexity of the file
    - think about format and save some money
    - e.g. a specialist report deposited – docx (£2) vs doc (£4) vs pdf (£6)
    - e.g. a georectified image – jpg/jpw (£4) vs tif/tifw (£2)

- geophysics – charges on an area basis
  - experiments with banding but desire for granularity

Image: Historic England 2012 *The Geophysical Survey Database*
Balancing the cost – how we charge

• images – reduction in overall charging with increasing numbers
  • OASIS Images

• ‘start up fee’
  • for deposits via ADS-easy (£200)
  • for traditional deposits (£500)
    • less automation, more manual checking required

• storage and refreshment

• additional charges for complex interface design

Image © Wessex Archaeology
Planning for preservation and passing on costs

- know the data you are creating /depositing
- plan for preservation from the outset and don’t simply ‘react’ afterwards
- think about creating a data management planning
- use the resources available to cost for preservation as early as possible in a project
  - clear expression of charges
  - ADS [Costing Calculator](http://archaeologydataservice.ac.uk)
  - contact the ADS to get a ‘bespoke’ costing
- these tools allow you to factor in charges for deposition of data when tendering for work
Why does preservation seem so expensive?

- data preservation is much more than data storage
- requires specialist staff with the specific skills
- requires a complex technical infrastructure and access to resources
- requires qualitative assessment and validation
- requires a complex workflow of accession, preservation and dissemination
- requires checking and re-checking
- requires documentation
- requires communication
- requires active management of data to maintain data integrity (data is friable) – ‘normalisation’ of data
Questions, comments and discussion about charging and costing?

What do you think about the cost of archiving?

Images: OpenClipArt.org
Guidance and best practice on formats and metadata.
Guidance and best practice (General)

Digital Preservation Coalition

- Knowledge Base
  - technology watch report
  - digital preservation handbook
  - preservation tools
  - events (webinars and workshops)

- ‘Bit List’ of digitally endangered species
  - crowd-sourcing exercise to discover which digital materials our community thinks are most at risk, as well as those which are relatively safe thanks to digital preservation

Useful resource: [https://www.dpconline.org/](https://www.dpconline.org/)
Guidance and best practice on formats and metadata

ADS/Digital Antiquity Guides to Good Practice

- Digital Data (general)
- Data-type specific
- GIS
- CAD
- 3D Models
- Geophysics
- Aerial Survey
- Laser Scanning
- Remote Sensing
- Photogrammetry

http://guides.archaeologydataservice.ac.uk/
Guidelines for Depositors

Focus on deposition with the ADS, but lots of, but lots of good general advice on data management

- Preparing Collections for Deposit
  - DMP
  - File management (formats, naming, versioning, etc)
- Appropriate documentation
- Metadata

https://archaeologydataservice.ac.uk/advice/guidelinesForDepositors.xhtml
Data Management Planning

A data management plan (or DMP) is a formal document that outlines how data will be handled during a research project, and also once that project has been completed. The aim of the DMP is to consider the many aspects of data management throughout the data lifecycle; this ensures that all data produced is well-managed in the present, and prepared for preservation in the future.

• Thinking about data management allows us to understand how data is created, generated, stored, preserved and used
• This isn’t something simply for those undertaking academic research, but for all of us who are actively creating digital data
• Useful resource: Digital Curation Centre has a wide variety of resources online to help – e.g. https://dmponline.dcc.ac.uk/
Data Management Planning

- ensure data is accurate, complete, authentic and reliable
- flag up where assistance may be necessary
- improve efficiency and unnecessary duplication of effort
- communicate process to others (enable continuity if staff changes)
- save time and resources
- improve data security and minimise risk of data loss
- think about what data will be created and how
- professional reasons
- moral obligation
- provides a practical starting point to help structure thoughts
- ensure data preservation (in short and long term) and allows you to plan for preservation AND reuse
Data Management Planning

• Data management is as a first-class endeavour, to which appropriate time and effort should be allocated and suitable funds earmarked

*YAWN*
Data management is just SO BORING!

I just don’t have time to think about that DMP.

... but I could be sorting out those environmental samples

Adapted from © Sherry Torkos
Selection and retention

Toolkit for Selecting Archaeological Archives

_The purpose of this Toolkit is to provide a set of useful and flexible resources to assist archaeological practitioners during the creation of project-specific Selection Strategies for the Working Project Archive ... it is necessary for a selection strategy to be developed for all archaeological projects. The toolkit can be used to aid and inform that process._

Not simply about physical archives, but include details on digital outcomes as well

Useful resource: [http://cifa.heritech.net/selection-toolkit](http://cifa.heritech.net/selection-toolkit)
Selection and retention

Useful resources:
- DPC’s Digital Preservation Handbook useful section on appraisal
- ADS’ Guidance on the selection of material for deposit and archive
- getting advice from those setting the requirement to deposit data

Getting data appraisal and selection right is important?
- save time and resources
- improve efficiency and unnecessary duplication of effort
- cost

Adapted from © Hakan Forss
All the information you could ever need

What ever the tool for deposition the [Guidelines for Depositors](http://archaeologydataservice.ac.uk) provides all the information you need:

- Depositing with the ADS
- Preparing for deposit
- Collection level metadata
- File level metadata
- Accepted formats
- Deposit checklists

But we also host more general information about digital preservation and archiving

- Archaeology Data Service / Digital Antiquity [Guides to Good Practice](http://archaeologydataservice.ac.uk)
- Data management and plans
- And much, much, more

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http://archaeologydataservice.ac.uk
Questions, comments and discussion about best practice?

Images: [OpenClipArt.org](http://openclipart.org)

The ADS-easy 2.0 Handbook provides detailed guidance on using ADS-easy and also includes information on OASIS Images.

You can download it from the Workshop page on the ADS website: https://archaeologydataservice.ac.uk/learning/DevonWorks hop2019.xhtml

Please let us know if you are having problems using the system via the ADS helpdesk help@archaeologydataservice.ac.uk, or https://archaeologydataservice.ac.uk/about/contact.xhtml
Exercise (Therapy session): Split into groups (5-6 people) and discuss your experiences in depositing data, particularly the use of ADS-easy/OASIS Images.

- What works and didn’t work?
- What do you like and don’t you like?
- Are their any common problems or issues?

Outcome 1: Each group to create lists of good/bad points (20 mins)
Outcome 2: From the lists produced, identify two/three of you ‘best’/’worst’ points (5 mins)

Report best/worst things back to the room

Image: ©Ginger’s Blog

http://archaeologydataservice.ac.uk
Specific questions, comments and discussion about ADS-easy?

Have you got any ‘top tips’?

Images: OpenClipArt.org
The future: the development of OASIS.
The future: redevelopment of OASIS

HERALD (*Historic Environment Research Archives, Links and Data*) is the name given to the redevelopment of the OASIS...

- rebuilt to accommodate a wider range of workflows for users – continued support for current users, and also support the maritime environment, museums & archives, buildings, geophysics, etc.
- support for wider range of workflows for HER’s - review not validation to expedite the transfer of reports into the public domain
- more up-to-date technology (e.g. semantic interoperability, GIS)
- technical improvements to improve use
- records always open, use of versioning

See HERALD webpage ([https://oasis.ac.uk/pages/wiki/HERALD](https://oasis.ac.uk/pages/wiki/HERALD)) for more information
The future: redevelopment of OASIS - HIAS

- not happening in isolation
- funding from Historic England is as a distinct Work Package (Collecting + Validating) within their Heritage Information Access Strategy (HIAS)
  https://historicengland.org.uk/research/support-and-collaboration/heritage-information-access-strategy/
- Additional funding from HES as part of reporting to DES
- Ongoing talks with DoE NI (use of the form) and RCAHMW/Welsh Trusts (sharing metadata)
The future: redevelopment of OASIS - Timescales

Database and Java framework

Pre-Alpha testing in Autumn 2018

Alpha testing Spring 2019

New form available in beta March 2020
The future: redevelopment of OASIS – Where are we?

- a new database is in place
- Java application (i.e. the form in place)
- workflows mapped (i.e. what happens when!)
- mapping to existing heritage thesauri completed
- migration of data from old to new database completed
- basic form in place
The future: redevelopment of OASIS – Going pretty well?

"When Alexander of Macedonia was 33, he cried salt tears because there were no more worlds to conquer... Eric Brislow's only 27"

SID WADDELL
The future: redevelopment of OASIS

Excavation at random

Event type

Event details

Event type

Reason for investigation

Heritage Data
Linked Data Vocabularies for Cultural Heritage

Property                  Value
---                      ---
skos:prefLabel          Excavation
skos:relatedScheme      SKOS Event Types Thesaurus
skos:scopeDescription   Controlled attribute framework which examines, records and interprets archaeological deposits, features and site on land or within the indus valley zone.
skos:provider           Generic
skos:license            http://creativecommons.org/licenses/by/3.0
skos:creator            Historic England
skos:isPrimaryTopicOf   http://www.historicengland.org.uk

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http://archaeologydataservice.ac.uk
The future: redevelopment of OASIS

- OS admin area
- HER area
- Research Framework
- Museums
The future: redevelopment of OASIS
The future: redevelopment of OASIS

- HERALD web site: [http://oasis.ac.uk/pages/wiki/HERALD](http://oasis.ac.uk/pages/wiki/HERALD)
- Subscribe to the OASIS Blog: [http://archaeologydataservice.ac.uk/blog/oasis](http://archaeologydataservice.ac.uk/blog/oasis)
- Contact HERALD: herald@ads.ac.uk
- Twitter: [@oasis_data](http://twitter.com/oasis_data)
Any questions?

Images: OpenClipArt.org
Thank You!

Further information

http://archaeologydataservice.ac.uk