

Deposition: costing, best practice and practical advice



ARCHAEOLOGY
DATA SERVICE

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Introduction



Image © <https://www.123rf.com/>

- 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



Image © www.digitalbevaring.dk

Depositing with the Archaeology Data Service

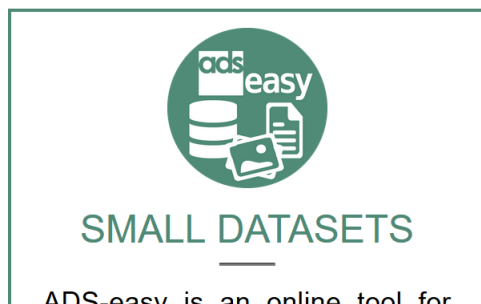
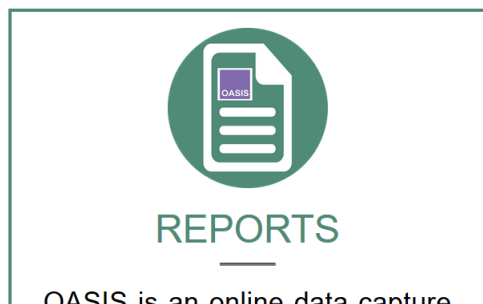
- Set up in 1996
- Based within the University of York
- Trusted repository with over 20 years dealing with outputs of archaeological projects
- Working with the wider digital archiving community, particularly [DPC](#) and [DCC](#)
- [Data Seal of Approval 2010](#), renewed in 2013 when the [2014-15 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



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](#)
- A fixed-price service which costs **£150+VAT** per image collection

OASIS DATA COLLECTION FORM: England

OASIS DATA COLLECTION FORM: England

OASIS

ADS-easy HOME | PROJECTS | ACCOUNT | ABOUT | HELP

Dr Fake User [Logout]

OASIS powered by ADS-easy

Step 1: OASIS Project Details | Step 2: OASIS Images Upload | Step 3: OASIS Images Submission

Before uploading your data please read the following instructions and guidance:

- We will accept jpgs, tiffs, pngs, gifs
- We require a spreadsheet to accompany the images as **xls** or **xlsx**
- Please ensure you files adhere to the [file naming strategy](#)
- Please read these instructions about [creating a ZIP file](#)

While the ADS is able to accept most of the major image file formats there are some which may be problematic, consequently we ask that you consult our list of [preferred or accepted formats](#) before uploading any data. If you have a preferred format that does not appear in the list then [contact us](#) for more information. Please ensure your files adhere to our [file naming strategy](#). The ADS also provides some guidance on [selecting material for deposition](#).

[Upload my data](#)

Once you have finished uploading your data you can view a summary of uploaded files before submitting your project in Step 3.

[legal statement](#) | [contact us](#)

OASIS: Please e-mail [Historic England](#) for OASIS help and advice
© ADS 1996-2014 Created by Jo Gilham and Jen Mitcham, email Last modified Thursday 16 October 2014
Cite only: <http://www.oasis.ac.uk/form/images.cfm> for this page

ADS-easy



**KEEP
CALM
AND
ARCHIVE
ON-LINE**

It's faster, cheaper, and better
with ADS-easy

www.archaeologydataservice/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



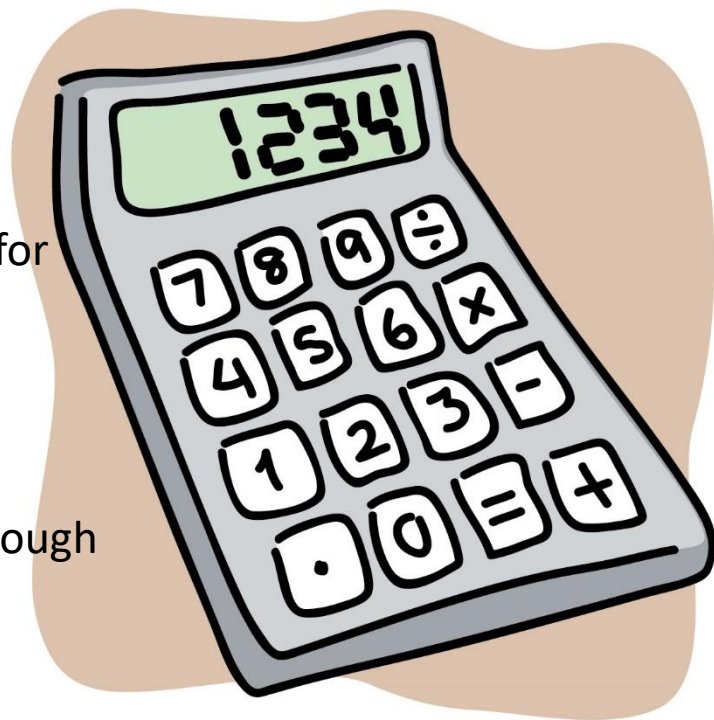


Find the right deposition route for your workflow
and the data that you have created

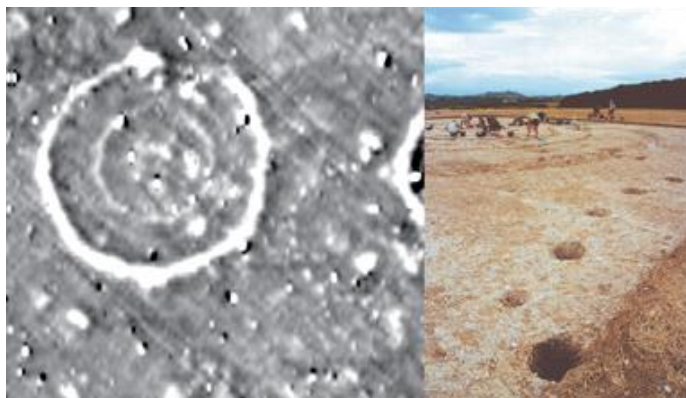
Still unsure... just contact us

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

Data Type: Extension: Quantity:

Data Type	File Extension	Quantity	File Preservation Cost	Remove
Databases	accdb	1 files	£6.00	x
Spreadsheets	xlsx	5 files	£30.00	x
Documents & Reports	docx	2 files	£4.00	x
Maps & Plans	dwg	10 files	£40.00	x
Photographs & Images	jpg	250 files	£59.53	x

Costing:

Number of Files	268
Number of Hectares	0
Startup Fee (Ingest, Interface, Admin, Management Costs)	£200.00
Subtotal (exc. VAT)	£339.53
TOTAL (inc. VAT)	£407.44



- 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](#)
 - 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



Images: OpenClipArt.org

Questions, comments and discussion about charging and costing?

What do you think about the cost of archiving?

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/>

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

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

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 well as the development of entirely new documents covering areas such as marine survey, laser scanning, close-range audio and digital video. The project has involved previous Guides authors revising existing content alongside new to 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 and access to digital records of archaeological investigations. A major aim of the Guides is to provide the basis for workflows that will create digital datasets that can be archived and shared effectively by Digital Antiquity's tDAR and by the Archaeology Data Service in the UK. The development of the Guides involves close collaboration with 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 the basis of a guide focussed on marine survey. In addition, the incorporation of findings from the ADS Big Data project of the existing guide on aerial photography and remote sensing data, has seen a significant contribution to the guide 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

ads ARCHAEOLOGY
DATA SERVICE

tDAR The Digital
Archaeological
Record
A SERVICE OF DIGITAL ANTIQUITY

The Andrew W. Mellon Foundation ENGLISH HERITAGE AVENUS aace European Commission Culture Programme Information Society

<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>

Image: © Digital Preservation Business Case Toolkit

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/>



<http://www.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



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>



Flint analysis (© Wessex Archaeology)

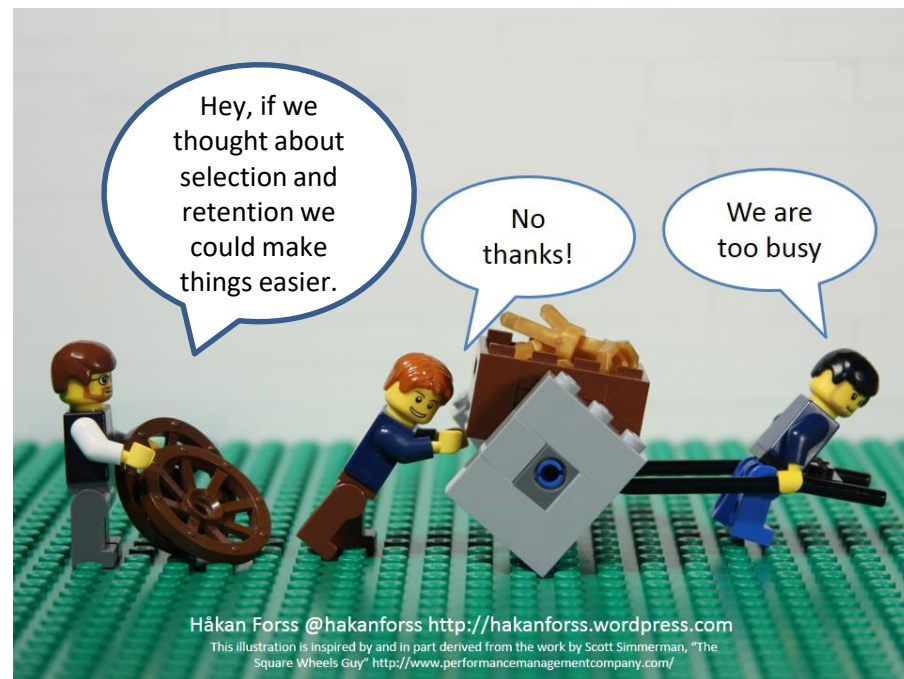
Selection and retention

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

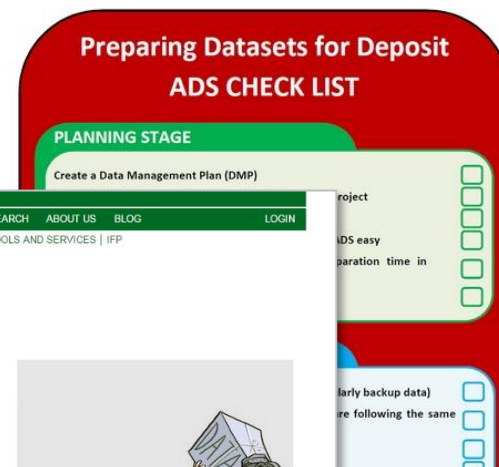
All the information you could ever need

Whatever the tool for deposition the [Guidelines for Depositors](#) 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](#)
- [Data management and plans](#)
- And much, much, more



Example of completed metadata sheet for Raster Images files deposited with the ADS

File name	Caption	Subject Keyword 1	Subject Keyword 2	Subject Keyword 3	Period term 1 (MIDAS)	Period term 2 (MIDAS)	Period term 3 (Other)	Period date (BC date should be prefixed using a minus symbol)	
								Start date	End date
example1.jpg	Selection of finds recovered during excavations at the King's Manor, York	Pot	Brooch	Key (locking)	Medieval			1300	1350
example2.jpg	Pottery recovered during excavations at the King's Manor, York	Pot			Medieval			1300	1350
example3.jpg	Brooch recovered during excavations at the King's Manor, York	Brooch			Medieval			1300	1350
example4.jpg	Key recovered during excavations at the King's Manor, York	Key (locking)			Medieval			1300	1350
example5.jpg	Nine Maidens stone circle showing north/south gap looking north	Stone Circle	Standing Stone	Scraper	Late Neolithic	Bronze Age		-2500	-800
example6.jpg	Nine Maidens stone circle from the east	Stone Circle	Standing Stone		Late Neolithic	Bronze Age		-2500	-800
example7.jpg	Nine Maidens stone circle from the west	Stone Circle	Standing Stone		Late Neolithic	Bronze Age		-2500	-800
example8.jpg	Nine Maidens stone circle showing north/south gap looking north	Stone Circle	Standing Stone	Scraper	Late Neolithic	Bronze Age		-2500	-800

Questions, comments and
discussion about best practice?



Images: OpenClipArt.org

Depositing: Using ADS-easy: a practical guide.

Depositing: Using ADS-easy: a practical guide.

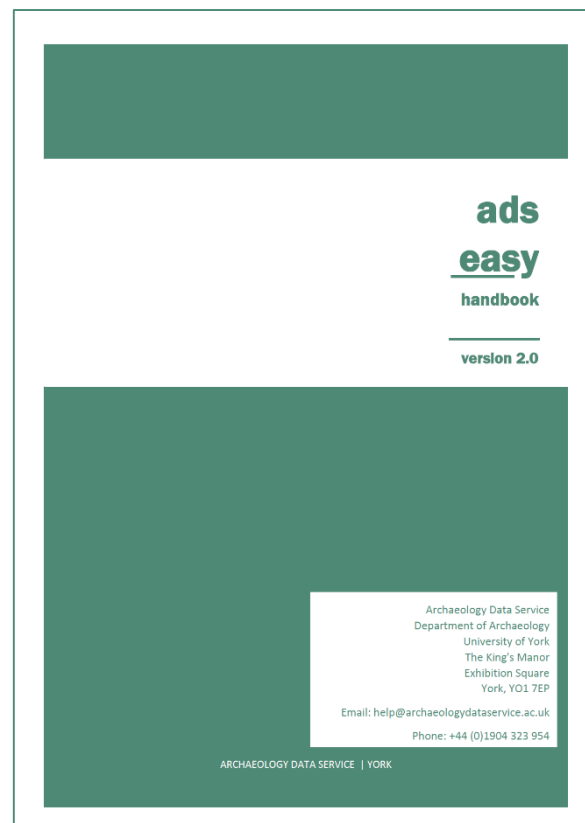
The [ADS-easy 2.0 Handbook](#) provides detailed guidance on using ADS-easy and also includes information on OASIS Images

You can download it from the Workshop page on the ADS website:

<https://archaeologydataservice.ac.uk/learning/DevonWorkshop2019.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 there 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 your 'best'/'worst' points (5 mins)

Report best/worst things back to the room

Image: ©Ginger's Blog

Image: ©PNGImages

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>) 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 Bristow's only 27"**

SID WADDELL



The future: redevelopment of OASIS

Excavation at random

Event type

Cancel edit

Save page

Event details

Event type

Enter search term and click look up

Look up event types

Event type

i

Excavation

Reason for investigation

Personal

Cancel edit

Save page

Heritage Data

Linked Data Vocabularies for Cultural Heritage

[Scheme List](#)
[Concept Search](#)
[SPARQL Query](#)
[About The Project](#)

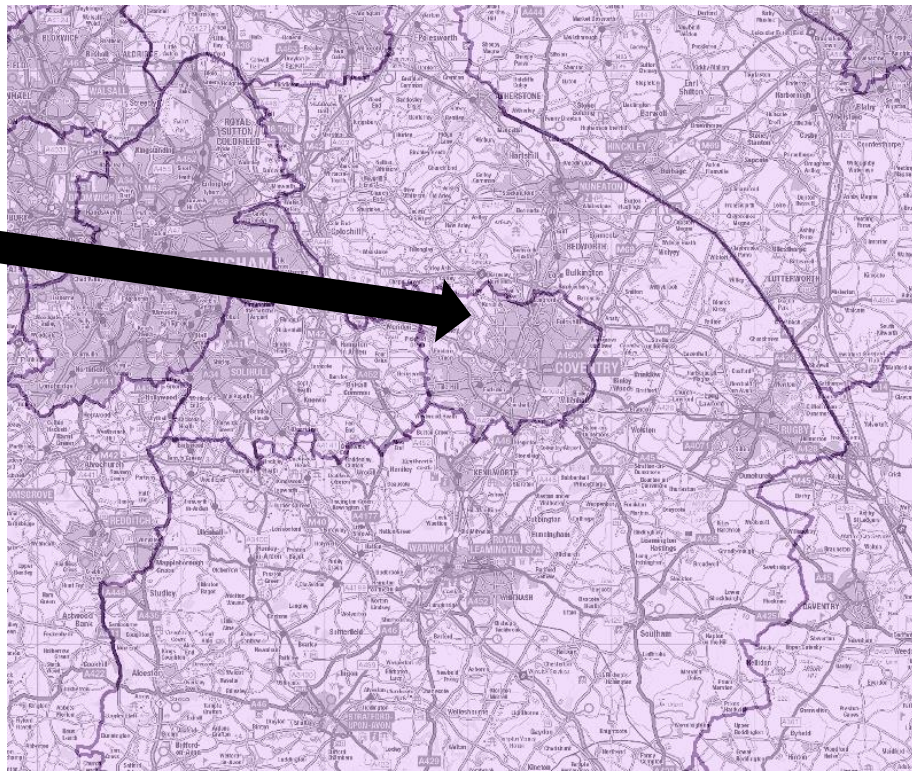
http://purl.org/heritagedata/schemes/agl_et/concepts/145129 ([QR Code](#))

Property	Value
rdf:type	skos:Concept
cc:license	http://creativecommons.org/licenses/by/3.0
cc:attributionURL	http://www.historicengland.org.uk
cc:attributionName	Historic England
skos:inScheme	FISH Event Types Thesaurus
skos:prefLabel	Excavation
skos:narrower	Strip Map And Sample
skos:narrower	Research Excavation
skos:narrower	Box Trenching
skos:narrower	Rescue Excavation
skos:narrower	Underwater Excavation
skos:narrower	Open Area Excavation
skos:broader	Archaeological Intervention
skos:scopeNote	Controlled intrusive fieldwork which examines, records and interprets archaeological deposits, features and structures on land or within the inter-tidal zone.
dct:publisher	http://www.historicengland.org.uk
dct:identifier	http://purl.org/heritagedata/schemes/agl_et/concepts/145129
dct:issued	2019-07-19T15:51:21

RDF downloads ([N-Triples](#) [Turtle](#) [JSON](#) [XML](#))

The future: redevelopment of OASIS

- OS admin area
- HER area
- Research Framework
- Museums



The future: redevelopment of OASIS

Devon Historic Environment Record

Organisation details

Description: Awaiting information on this organisation

Date registered with OASIS:

ADS Licence signed: false

Organisation role(s) in OASIS

- HER

HER: Devon Historic Environment Record (18)

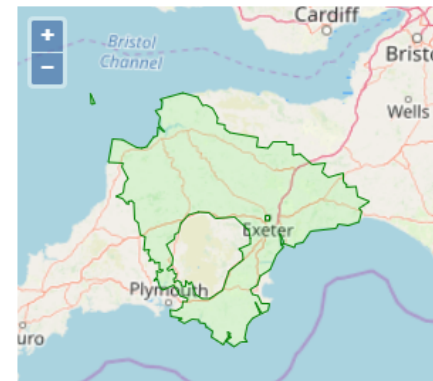
HER Description: Awaiting information on this role

This organisation is reviewing records in their area

No of OASIS forms in review area: 2035

Review area

The area will appear on this map



The future: redevelopment of OASIS

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

Any questions?



Images: OpenClipArt.org

Thank You!

Further information

<http://archaeologydataservice.ac.uk>