Digital Data and Archaeology: Management, Preservation and Publishing

Archeology Data Service
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http://archaeologydataservice.ac.uk
Outline

- Why Deposit
- OAIS Model
- Digital Preservation Methods
- ADS Archiving Strategy
- Data Seal of Approval
- Digital Preservation Coalition
Why Deposit?

1. Ensure Preservation
Why Deposit?

1. Ensure Preservation
2. Provide Access
Why Deposit?

1. Ensure Preservation
2. Provide Access
3. Professional Recognition
Why Deposit?

1. Ensure Preservation
2. Provide Access
3. Professional Recognition
4. Follow Professional Standards
Data Deposit Requirements

The Standard

All archaeological projects that include the recovery or generation of data and/or archaeological materials (finds) will result in a stable, ordered, accessible archive. All archaeologists are responsible for ensuring that the archive is created and compiled to recognised standards, using consistent methods, and is not subject to unnecessary risk of damage or loss.

Codes of Conduct

The archaeologist has responsibility for making available the results of archaeological work with reasonable dispatch

www.archaeologists.net/codes/ifa
Why Deposit?

1. Ensure Preservation
2. Provide Access
3. Professional Recognition
4. Follow Professional Standards
5. Meet Governmental Requirements
Data Deposit Requirements

POLICY HE12: POLICY PRINCIPLES GUIDING THE RECORDING OF INFORMATION RELATED TO HERITAGE ASSETS

HE12.1 A documentary record of our past is not as valuable as retaining the heritage asset, and therefore the ability to record evidence of our past should not be a factor in deciding whether a proposal that would result in a heritage asset’s destruction should be given consent.

HE12.2 The process of investigating the significance of the historic environment, as part of plan-making or development management, should add to the evidence base for future planning and further the understanding of our past. Local planning authorities should make this information publicly available, including through the relevant historic environment record.

HE12.3 Where the loss of the whole or a material part of a heritage asset’s significance is justified, local planning authorities should require the developer to record and advance understanding of the significance of the heritage asset before it is lost, using planning conditions or obligations as appropriate. The extent of the requirement should be proportionate to the nature and level of the asset’s significance. Developers should publish this evidence and deposit copies of the reports with the relevant historic environment record. Local planning authorities should require any archive generated to be deposited with a local museum or other public depository willing to receive it. Local planning authorities should impose planning conditions or obligations to ensure such work is carried out in a timely manner and that the completion of the exercise is properly secured.
Data Deposit Requirements


Policies but which would secure the future conservation of a heritage asset, outweigh the disbenefits of departing from those policies.

141. Local planning authorities should make information about the significance of the historic environment gathered as part of plan-making or development management publicly accessible. They should also require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.

13. Facilitating the sustainable use of minerals
Why Deposit?

1. Ensure Preservation
2. Provide Access
3. Professional Recognition
4. Follow Professional Standards
5. Meet Governmental Requirements
6. Meet Funding Agency Requirements
Data Deposit Requirements

AHRC

- Submission of a ‘Technical plan’ replaces the Technical Appendix as of 2012

- is essential :-
  “where digital outputs or digital technologies are an essential part to the planned research outcomes”.

This should give a summary of those outputs, explain the technical methodology, technical support / experience, and address preservation, sustainability and use.

http://www.ahrc.ac.uk/Funding-Opportunities/Research-funding/RFG/Application-guidance/Pages/Technical-Plan.aspx
Data Deposit Requirements

NERC

• A mandatory, single page, Outline Data Management Plan (ODMP) is required for all grant and fellowship applications
  • since 1 August 2012

• “This full DMP should be mutually agreed between the Data Centre and the Principal Investigator within three months of the start date of the grant. At the end of an award Investigators are required to offer the appropriate Data Centre a copy of any dataset generated, so that the data can be made available for other researchers to use.”

http://www.nerc.ac.uk/research/sites/data/dmp.asp
Data Deposit Requirements

HLF

The Heritage Lottery Fund has new HLF advice for applicants that asks them to consider what will happen to their project outputs in the long term and new requirements for the digital material it funds; these include:

• any digital output must retain full functionality for five years after the end of the project
• underlying data sets must be available for the life time of the contract with the HLF (10 years for projects awarded less than £200,000; 25 years above £200,000)
• The outputs, including all files, must be available free of charge for non-commercial use

While this should not be taken as an exhaustive or complete list of HLF Terms of Grant these are three areas where many HLF projects may need to take advice.
What happens to data once it’s deposited?
Digital Preservation

- Complex process
- Lots of time and effort required
- Standards and guidelines to follow
Digital Preservation

3 Methods

• The Hardware Museum

• The Software Emulator /Virtualisation

• Migration

NB much more intervention is needed than conventional archives
Open Archival Information System (OAIS) reference model

- Established by the Consultative Committee for Space Data Systems (CCSDS)
- International ISO standard 14721
Digital Preservation Standards
Digital Preservation Standards

- provides a framework for the understanding and increased awareness of archival concepts needed for preservation and access
- provides the concepts needed by non-archival organizations to be effective participants in the preservation process
- provides a framework, including terminology and concepts, for describing and comparing architectures and operations of existing and future archives
- provides a framework for describing and comparing different long term preservation strategies and techniques
- provides a basis for comparing the data models of digital information preserved by archives and for discussing how data models and the underlying information may change over time
- provides a foundation that may be expanded by other efforts to cover long-term preservation of information that is not digital
- expands consensus on the elements and processes for long-term preservation and access, and promotes a larger market which vendors can support
- guides the identification and production of OAIS-related standards
• **Submission Information Package (SIP):**
  Original data supplied by the producer (creator or depositor) including documentation to facilitate archiving and reuse.

• **Archival Information Package (AIP):**
  Data generated from the SIP and the long-term Preservation package managed within the OAIS Including administrative, technical and reuse documentation.

• **Dissemination Information Package (DIP):**
  Data generated from the SIP/AIP and made available to consumers (users) including documentation to facilitate use.
Behind the Scenes at the ADS

- Ensure the multiple and regular backups and the renewal of storage media
  - 23 Virtual Machines
  - Tape backup at University of York
  - Deep Store – UK Data Archive
  - Five year hardware rotation strategy

- Use data migration strategies

- Follow the Open Archival Information System (OAIS) reference model
Preservation and Digital Archiving

"The single most useful thing you can do to ensure the long-term preservation of your data is to plan for it to be re-used. Imagining it being reused by someone else who has never met you and who never will meet you, will cause you to approach the creation and design of your data in a new light. Moreover, studies show that re-use of data is the single surest way of maintaining the integrity of data and tracking errors and problems with it. In short, always plan for re-use* Prof Julian Richards, Director ADS.

One of the core activities of the Archaeology Data Service is the long term digital archiving of the data that has been entrusted to us. We follow the Open Archival Information System (OAI) reference model and also have several internal policies and procedures that guide and inform our archiving work in order to ensure that the data in our care is managed in an appropriate and consistent way.

ADS Preservation Policy (PDF)
ADS Repository Operations (PDF)
ADS Ingest Manual (PDF)
Copyright Infringement Policy (case study)
Reference Model for an Open Archival Information System (PDF)

The ADS was first awarded the Data Seal of Approval (DSA) in March 2011. ADS’s Data Seal of Approval was renewed in 2013 when new OAI standards were released for 2014-15. This demonstrates the robustness and sustainability of our archival processes. Further information about the DSA as well as our self-assessment with descriptions of how we meet each of its 16 guidelines can be found on the Data Seal of Approval website. An article ADS and the Data Seal of Approval – case study for the DCC describing how and why we made the DSA application is available from the Digital Curation Centre and would be useful reading for any other archive thinking of undertaking this process.

The ADS is also an associate member of the Digital Preservation Coalition (DPC) and was awarded the DPC’s Decennial Award in 2012 for the most outstanding contribution to digital preservation over the last decade.

http://archaeologydataservice.ac.uk/advice/preservation
Digital Preservation Standards

Open Archival Information System (OAIS) reference model

Image © www.digitalbevaring.dk
Digital Preservation Standards
Open Archival Information System (OAIS) reference model
**Guidelines for Depositors**

Version 2.0 September 2014.

**Contents**

- Introduction to the Guidelines
- Why Deposit Data?
- Depositing with the ADS
  - What to deposit
  - How to deposit
  - Costs
- Preparing Collections for Deposit
  - Data Management Plans
  - File Management (Formats, Structure, Naming)
- Metadata
  - Selection and Retention
- File-level Metadata Requirements
  - Documents
  - Databases, Spreadsheets and Statistics
  - Raster Images
  - Geophysics and Remote Sensing
  - CAD and Vector Images
  - Geographical Information Systems
  - Video and Audio
  - Virtual Reality
- Collection-level Metadata
- Deposit Check List
- Downloads
- Acknowledgements

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

<table>
<thead>
<tr>
<th>File name</th>
<th>Caption</th>
<th>Subject Keyword 1</th>
<th>Subject Keyword 2</th>
<th>SubjectKeyword 3</th>
<th>Period term 1 (MIDAS)</th>
<th>Period term 2 (MIDAS)</th>
<th>Period term 3 (Other)</th>
<th>Start date</th>
<th>End date</th>
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</thead>
<tbody>
<tr>
<td>exampl01.jpg</td>
<td>Selection of tools recovered during excavations of</td>
<td>Pot</td>
<td>Brook</td>
<td>Key Locking</td>
<td>Medieval</td>
<td>1300</td>
<td>1330</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>the King's Manor, York</td>
<td></td>
<td></td>
<td></td>
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<td>Pottery recovered during excavations at the</td>
<td>Pot</td>
<td></td>
<td></td>
<td>Medieval</td>
<td>1300</td>
<td>1330</td>
<td></td>
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<td>Bone recovered during excavations at the</td>
<td>Brook</td>
<td></td>
<td></td>
<td>Medieval</td>
<td>1300</td>
<td>1330</td>
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<td>Key Locking</td>
<td></td>
<td></td>
<td>Medieval</td>
<td>1300</td>
<td>1330</td>
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<td>Manor, York</td>
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<td>Nine modern stone circle showing north east gap</td>
<td>Stone Circle</td>
<td>Stone</td>
<td>Scraper</td>
<td>Bronze Age</td>
<td>-250</td>
<td>-200</td>
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<td></td>
<td>looking north</td>
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<td>Nine modern stone circle from the east wall</td>
<td>Stone Circle</td>
<td>Stone</td>
<td>Late Neolithic</td>
<td>Bronze Age</td>
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<td>-200</td>
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<tr>
<td></td>
<td>looking north</td>
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<td>Nine modern stone circle showing north east gap</td>
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<td>Stone</td>
<td>Scraper</td>
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<td>-200</td>
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<tr>
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<td></td>
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<td>Stone</td>
<td>Scraper</td>
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<td>-250</td>
<td>-200</td>
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<tr>
<td></td>
<td>looking north</td>
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<td></td>
</tr>
</tbody>
</table>
Open Archival Information System (OAIS) reference model
Deposit Evaluation

- Intellectual content & potential interest in their re-use
  - Who will be interested in the data in the future?

- Viability of data management, preservation, and distribution
  - Assessment of data structure and format
  - Nature and completeness of documentation
  - Technical and cost benefit issues

- Other suitable archives?
  - Might the data be better deposited elsewhere, with better suited expertise or re-use potential?
  - Prevent duplication of archiving efforts within archaeological community
Deposit Requirements

• Authority to deposit the data
  – Permissions obtained in terms of Rights over the data.
  – Able and willing to grant repository a licence to disseminate the data.

• Material is ‘complete’
  – ADS: finished project archives that will not be added to.
  – DSpace: Individual digital entity is complete, i.e. not draft a version of paper.

• Digital form in preferred file format – consult repository websites
  – Most common file formats accepted
  – Open formats preferred

• Sufficient project documentation and file Metadata
Open Archival Information System (OAIS) reference model
Submission Information Package (SIP)

- Virus check
- Media and file readability check
- Data resource integrity check
- Check file formats suitable for deposit
- Documentation completeness check
- Data validation and consistency checks
- Web interface text check
- Copy to data server
Submission Information Package (SIP)

- Authenticate original version
- Replace spaces with underscores
- Log details of SIP in Collections Management System
- Create checksums
- Run Droid to generate file level metadata
- Store licence in AIP directory
- Acknowledge receipt of data
- Store original media
Digital Preservation Standards

Collections Management System

Welcome to the CMS

OASIS reports ready to be released: 3

CMS Stats:

- Tracking Projects: 2534
- Collections: 1173
- Accessions: 3118
- Processes Performed: 10851
- Different Software Used: 338
- People: 2223
- Organisations: 017

Embargo List: These are the collections in which the embargo date is about to be passed, or has already been passed:

<table>
<thead>
<tr>
<th>Collection Id</th>
<th>Title</th>
<th>Embargo Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1003925</td>
<td>Ancient mitochondrial DNA sequence and SNP data from Andaman and Nicobar museum samples</td>
<td>01-Jan-2014</td>
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</table>

Web Interface List: These are the collections in which the web interface needs attention:

<table>
<thead>
<tr>
<th>Collection Id</th>
<th>Title</th>
<th>Note(s)</th>
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</thead>
<tbody>
<tr>
<td>1000768</td>
<td>A Review of Animal Bone Evidence from Central England</td>
<td>Rewrite queries</td>
</tr>
<tr>
<td>10008853</td>
<td>A Review of Animal Bone Evidence from Southern England</td>
<td>Rewrite queries</td>
</tr>
<tr>
<td>1000429</td>
<td>Analysis of Roman Silver Coins, Augustus to Nero (27 BC - AD 69)</td>
<td>Rewrite queries</td>
</tr>
<tr>
<td>1000315</td>
<td>Bibliography of the Vernacular Architecture Group</td>
<td>Rewrite queries</td>
</tr>
</tbody>
</table>
## Digital Preservation Standards

### Collections Management System

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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<tbody>
<tr>
<td>Creator(s)</td>
<td>Roger White, Jenny Marriott, Malcolm Reid</td>
</tr>
<tr>
<td>Title</td>
<td>Wroxeter Conservation Plan</td>
</tr>
<tr>
<td>Publication Year</td>
<td>2012</td>
</tr>
<tr>
<td>Subject(s)</td>
<td>Wroxeter (England)--Antiquities, Roman [LCSH]</td>
</tr>
<tr>
<td></td>
<td>BATHS [NMR Monument Types]</td>
</tr>
<tr>
<td></td>
<td>LEGIONARY FORTRESS [NMR Monument Types]</td>
</tr>
<tr>
<td></td>
<td>TOWN [NMR Monument Types]</td>
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<tr>
<td></td>
<td>SETTLEMENT [NMR Monument Types]</td>
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<td>English Heritage [Funder]</td>
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<td>University of Birmingham [Copyright holder]</td>
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<td>Date Created:</td>
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<td>Date Created:</td>
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</tr>
<tr>
<td>Alternate Identifier:</td>
<td>1166</td>
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<td>1166</td>
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<tr>
<td>Version:</td>
<td>1</td>
</tr>
<tr>
<td>Version:</td>
<td>1</td>
</tr>
<tr>
<td>Description:</td>
<td>In 2009, English Heritage commissioned a Conservation Plan for Wroxeter Roman City from Dr Roger White, Ironbridge Institute, University of Birmingham. This was one of two sites to act as a pilot project (EH Project Number AA090778/CP) to test the application of the then (null [NMR Monument Types (class)])</td>
</tr>
</tbody>
</table>
## Collections Management System

### ADS Collection Management System

**20-28 College Street, Southampton (OASIS ID thamesva1-40314) (Collection Id: 1001068)**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td><strong>Collection Name</strong>:</td>
<td>20-28 College Street, Southampton (OASIS ID thamesva1-40314)</td>
</tr>
<tr>
<td><strong>Description</strong>:</td>
<td>The site is located within the urban environment of Southampton city (Fig. 1). It occupies roughly 0.25ha at the junctions of College Street and Richmond Street with Three Field Lane. To the north of the site, urban development which stretches for some 500m. To the west of the site is the River Itchen, south is the River Test and the Town Quay, the west is Lansdowne Hill and docks. The site formerly consisted of three buildings fronting both College Street and Richmond Street. The evaluation has revealed just one feature of possible archaeological interest. The earliest feature on the site was a ditch.</td>
</tr>
<tr>
<td><strong>Version</strong>:</td>
<td>1</td>
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<tr>
<td><strong>DOI</strong>:</td>
<td>10.5281/1000412</td>
</tr>
<tr>
<td><strong>AIP Folder</strong>:</td>
<td>arch-1066-1</td>
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<tr>
<td><strong>AIP Check Complete</strong>:</td>
<td>YES</td>
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<td><strong>Type</strong>:</td>
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<td><strong>Language</strong>:</td>
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<td><strong>Created To Date</strong>:</td>
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<td><strong>Embargo Date</strong>:</td>
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<td><strong>First Released Date</strong>:</td>
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<tr>
<td><strong>Last Modified Date</strong>:</td>
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<td><strong>Intervention To Date</strong>:</td>
<td>29-Jan-2008</td>
</tr>
</tbody>
</table>

[Digital Preservation Standards](http://archaeologydataservice.ac.uk)
Open Archival Information System (OAIS) reference model
Archival Information Package (AIP)

- Check licence
- Check copyright and confidentiality clearance
- Consistency checks
- Selecting preservation and dissemination file formats
- Develop a conversion plan
- Convert the files
- Validate file conversion
- Metadata update

- Create and store checksums for the AIP
- Submit AIP for checking

© Digital Preservation Business Case Toolkit
**Digital Preservation Standards**

**Internal ADS guidance for all data types**

<table>
<thead>
<tr>
<th>Delivery</th>
<th>Preservation</th>
<th>Presentation</th>
<th>Notes</th>
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<td>Uncompressed Baseline</td>
<td>Portable Network Graphics .png or Joint Photographic Expert Group .jpg</td>
<td>Any EXIF &amp; IPTC metadata will also need preserving</td>
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<tr>
<td>Portable Network Graphics .png</td>
<td>Uncompressed Baseline</td>
<td>Portable Network Graphics .jpg</td>
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<td>Uncompressed Baseline</td>
<td>Portable Network Graphics .png</td>
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<td>Uncompressed Baseline</td>
<td>Portable Network Graphics .png</td>
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<td>Uncompressed Baseline</td>
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<td>Uncompressed Baseline</td>
<td>Portable Network Graphics .png</td>
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<td>CorelPaint .cpt</td>
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<td>Adobe Digital Negative .dng and Joint Photographic Expert Group .jpg</td>
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<td>JPEG2000 .jp2 / .jpx</td>
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Migration

Requires active and continuous management
Migration

Requires active and continuous management
Open Archival Information System (OAIS) reference model
Dissemination Information Package (DIP)

- Convert the files
- Validate file conversion
- Create web interface
- Allocate permanent urls / DOIs
- Pre-Release interface
- Make any depositor changes
- Release Archive
- Publicise Archive
How do we disseminate our data?

All of our holdings are freely available through a traditional Web interface and some as Linked Open Data.
University-led research projects

The Sutton Hoo Research Project 1983-2001
Martin Carver, 2004

Introduction
Overview
Downloads

Data copyright © Prof Martin Carver unless otherwise stated

The University of York

Primary contact
Prof Martin Carver
Department of Archaeology
University of York
King's Manor
Exhibition Square
York
YO1 7EP
England

The site before the commencement of the project in 1983 [Photo: Cliff Hoppitt].


Major infrastructure programmes
A Corpus of Early Anglo-Saxon Buckets
Jean Mary Cook, 2003

Introduction
When Jean Cook died in July 2001 the community of Anglo-Saxonists lost one of its eminent members. Her research on grave goods of the pagan period, specifically 'buckets', was a project she began in 1963 and which she diligently pursued through a busy professional life in Museums and University administration. In retirement her interests in teaching adult students and in participating in Oxfordshire historical and archaeological projects, still allowed her to become the first woman Secretary of the Society of Antiquaries of London. When her term of office came to an end she turned almost her whole attention to her research on buckets, intending to bring the work to a conclusion with a database and a monograph. Her copious notes and drawings over years, together with a database planned and operational, were in the files in her study when she died. Four of her friends and colleagues met to discuss how the work, so close to completion, could be brought to publication. They were Börje Brugmann, German archaeologist and friend; Helena Hamerow, archaeologist and at that time Director of the University of Oxford Institute of Archaeology; Tom Hassall, archaeologist, friend and colleague over many years; and Mary Hodges friend and colleague in many joint projects. Permission was obtained from the family to place the whole archive at the Institute of Archaeology and copyright to any material published was also vested in the Institute. Dr Brugmann prepared a detailed plan showing how the archive could be completed and published, and this plan was submitted to the Society of Antiquaries of London and the Marc Fitch Fund asking for financial support. The support was generously forthcoming and the work began in May 2002. The Institute of Archaeology provided the venue for the archive and for the work itself, including an office and the necessary computer links.

Funders

ADS Collection: 370
doi:10.5284/1000186
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Types of persistent identifiers include, Handles, Archival Resource Keys (ARKs) and Persistent URLs (PURLs), all can be resolved to an Internet location. The scheme that is gaining most traction is the Digital Object Identifier (DOI).

http://dx.doi.org/ 10.5284 / 1000389
resolver service  prefix  suffix
(assigning body)  (resource)
Archive of files and downloads of data

Open formats; open data

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Searchable interfaces
Online Publication and Digital Archive
Silchester

This development of an urban property in the Roman town of Calleva Atrebatum (Silchester, Hampshire, England) is traced from the late 1st to the mid 3rd century AD. Three successive periods of building with their associated finds of artifactual and biological remains are described and interpreted with provisional reconstructions of the buildings. Links are provided to a copy of the Integrated Archaeological Database (IAD), archived by the Archaeology Data Service, which holds the primary excavation and finds records.

Preparation of this electronic publication and associated images was assisted by a grant from the AHRC under the ICT Strategy programme.

Go to article Table of Contents

PERIODS
- This article will appeal to: Those interested in the development of urbanism in Roman Britain and the western Roman empire in the 1st to 3rd century AD as well as the development of individual properties and the relationship between the individual buildings and their associated finds of artifactual and biological remains, particularly animal and human bone and plant remains.
- Keywords: Roman Britain; town; Silchester; town houses; 1st/3rd-century AD; artifacts; osteological finds.

NEXT CONTENTS HOME COMMENTS
© Internet Archaeology URL: http://internet.ac.uk/journal/issue21/silchester/index.html
Last updated: Third Dec 12 2007

http://archaeologydataservice.ac.uk
The Silchester Project: Roman Town Insula IX The Development of an Urban Property c. AD 40-50 - c. AD 250
Amanda Clarke, Michael Fulford, Michael Rains, 2007

Introduction
Overview
Downloads
Query

Query - Results
Finds Query | Objects Query | Contexts Query
Full Record for Context Number 5393

Context Number: 5393

Description:
Beam slot cut containing (5339). [5393] meets with beam slot [5375] to form a right angled corner - the division of these two contexts was arbitrary. Also linked to beam slot [5396] Plan no: 28.216, 28.219 Accuracy rating - 4 (18/04/2005 KTOOTELL)

Notes:
Beam slot cut at the SW limit of the timber building containing (5339). [5393] meets with beam slot [5375] to form a right angled corner - the division of these two contexts was arbitrary. Also linked to beam slot [5396] Plan no: 28.216, 28.219 Accuracy rating - 4 (18/04/2005 KTOOTELL)

Composition:
Linear in plan, measuring 6m in length x 0.22m wide at the SW end and 0.62m at the NE end with a variable depth of 0.14-0.24m. Break of slope (top & base): sharp on the southern edge / gradual on the northern edge. Stepped sides with a flat, slightly convex base. Orientation: SW-NE. Contains (5339) (18/04/2005 KTOOTELL)

Occupying what became the angle between (ERTB1) consisted of two rooms. The walls were bounded by shallow slots. [5393]. At least three separate phases associated with the infilling of the room were a rectangular, tiled hearth (5919).)

Room 1

A · H · R · B
arts and humanities research board

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PREVIOUS NEXT LESS DETAIL COM

Period 2: Early Roman Timb
Room 1 | Room 2 | Function of the Building

Left: Reconstruction of Timber Buildings
Right: All Timber Buildings
Data Seal of Approval

The objectives of the Data Seal of Approval are to safeguard data, to ensure high quality and to guide reliable management of data for the future without requiring the implementation of new standards, regulations or high costs.

16 Guidelines for data producers, repositories and users

Accreditation Process

ADS only UK institution to have the most recent data seal.
Data Seal of Approval 2014-2015

Relating to Data Producers:

1. The data producer deposits the data in a data repository with sufficient information for others to assess the quality of the data and compliance with disciplinary and ethical norms.

2. The data producer provides the data in formats recommended by the data repository.

3. The data producer provides the data together with the metadata requested by the data repository.
Data Seal of Approval 2014-2015

Guidelines Related to Repositories:

4. The data repository has an explicit mission in the area of digital archiving and promulgates it.
5. The data repository uses due diligence to ensure compliance with legal regulations and contracts including, when applicable, regulations governing the protection of human subjects.
6. The data repository applies documented processes and procedures for managing data storage.
7. The data repository has a plan for long-term preservation of its digital assets.
8. Archiving takes place according to explicit work flows across the data life cycle.
9. The data repository assumes responsibility from the data producers for access and availability of the digital objects.
10. The data repository enables the users to discover and use the data and refer to them in a persistent way.
11. The data repository ensures the integrity of the digital objects and the metadata.
12. The data repository ensures the authenticity of the digital objects and the metadata.
13. The technical infrastructure explicitly supports the tasks and functions described in internationally accepted archival standards like OAIS.
Guidelines Related to Data Consumers:

14. The data consumer complies with access regulations set by the data repository.

15. The data consumer conforms to and agrees with any codes of conduct that are generally accepted in the relevant sector for the exchange and proper use of knowledge and information.

16. The data consumer respects the applicable licences of the data repository regarding the use of the data.
Data Seal of Approval 2014-15

- Archaeology Data Service
- Banco de Información para la Investigación Aplicada en Ciencias Sociales (BIIACS)
- DANS: Electronic Archiving SYstem (EASY)
- LINDAT-Clarin - Centre for Language Research Infrastructure in the Czech Republic
- Odum Institute Data Archive
- The Clarin centre at the University of Copenhagen
The Digital Preservation Coalition (DPC) is an advocate and catalyst for digital preservation, enabling our members to deliver resilient long-term access to content and services, and helping them derive enduring value from digital collections. We raise awareness of the importance of the preservation of digital material and the attendant strategic, cultural and technological issues. We are a not-for-profit membership organisation and we support our members through knowledge exchange, capacity building, assurance, advocacy and partnership. Our vision is to make our digital memory accessible tomorrow.

Digital Preservation Handbook
http://www.dpconline.org/advice/preservationhandbook