

## ADS/Internet Archaeology Annual Report 1 August 2017 – 31 July 2018

*The Archaeology Data Service (ADS) supports research, learning and teaching with free, high quality and dependable digital resources. It does this by preserving digital data in the long term, and by promoting and disseminating a broad range of data in archaeology. The ADS promotes good practice in the use of digital data in archaeology, it provides technical advice to the research community, and supports the deployment of digital technologies. It also manages the ejournal 'Internet Archaeology', published under a Council for British Archaeology imprint.*

### Highlights of the year

The last year has seen the successful conclusion of the NEARCH project, coordinated by our partners INRAP, the French state archaeological service. The focus of NEARCH was on public engagement in Archaeology and it allowed the ADS to step outside our usual areas of activity, supporting an online European Day of Archaeology, participating in the archiving and dissemination of a major survey of attitudes to Archaeology across Europe, and hosting a visiting artist from Columbia. NEARCH also contributed to the development of a mobile application which will be used in the new multi-partner Discovering England's Burial Spaces (DEBS) project. DEBS commenced in September 2017 and will run until February 2019, supported by Historic England. It is developing a workflow for the recording of burial spaces working with six community groups. As well as developing an OASIS+ form for graveyard recording projects the ADS will be hosting and archiving a pilot national database for burial records.

Another highlight was the release of the new look ADS website, in January 2018. The main aim of the new website design is to make it easier for users to access our searchable resources. With the launch of the ADS Library the ADS now provides three main heritage environment search tools: ArchSearch, ADS Archives and the ADS Library. The new site aims to make the difference between these search tools clearer to users, and makes all three tools easy to find.

In 2017-18 *Internet Archaeology* also celebrated the publication of its 50th issue: a special edition on "Big Data on the Roman Table", with a range of papers approaching new approaches to Roman tableware. This was one of five new issues published during the year.

The year closed with the release of a new online exhibition, "Wonders of the ADS". This developed out of a collaborative project with Carlotta Cammelli, a Leeds University MA Art Gallery and Museum Studies student as part of her Masters dissertation. The project, entitled *Unearthing the Archive: Exploring new methods for disseminating archaeological digital data*, aimed to develop an innovative online approach to present specific digital objects (such as photographs, drawings, documents, videos and 3D data files) from the ADS collections in order to increase public engagement with the data.

## 1. Preservation

In accordance with the internal policy of reviewing ADS procedure and policy on a regular basis the following key documents were reviewed and updated:

- Preservation Policy. The Preservation Policy provides an overview of the preservation and management strategies carried out to ensure the authenticity, reliability and logical integrity of all the resources entrusted to the care of the ADS.
- Repository Operations. The Repository Operations document, based largely on the OAIS Reference Model, details the technical and structural background to the management, archiving and curation of ADS datasets.
- Ingest Manual. The Ingest Manual records the processes carried out on datasets from the point of receipt of the Submission Information Package (SIP), through the archiving of the data, and the creation of both the Archival Information Package (AIP) and Dissemination Information Package (DIP).

In addition, the Digital Archivists undertook their annual review of metadata and file formats, with new and consistent guidance for depositors available on the new-look ADS website. Publicly accessible versions of all these documents have been made available on a designated Preservation page:

<http://archaeologydataservice.ac.uk/advice/PolicyDocuments.xhtml#PresPol>

### Deep Storage

The ADS Preservation Policy and Disaster Recovery Strategy require a copy of the Archival Information Package (AIP) to be held off-site (not including the backups maintained as part of our main storage strategy). In recent years this has been via physical and virtual servers maintained by the United Kingdom Data Archive (UKDA) at the University of Essex. This agreement has continued over the course of 2017-18, but due to ADS holdings increasing in size a review of alternative options has been undertaken. For interest, a short overview of the amount of data being accessioned by the ADS has been [written up as a blog](#). An exhaustive review of these options demonstrated that a continuation of the policy of purchasing physical storage or server space off a third party was practically and financially unsustainable. Upon consultation with the University of York's Information Technology Services (ITS), the final recommendation has been for the ADS to use of Cloud-based option for our 'off-site' storage. It should be reiterated that this does not replace the ADS main day-to-day storage and data recovery strategies, but is for disaster mitigation only.

Another internal review of the options for Cloud-based storage has led to a recommendation to use Amazon Web Services (AWS), with oversight and support from University of York ITS. It is anticipated that this solution enables full control over data at a relatively cheap cost. Use of the system will be under constant review, and data can be removed at any time should an alternative present itself. At the time of writing the final steps are being made for use of this system within in day-to-day work and formal SLA with ITS, and it is anticipated that the move from UKDA to AWS will be completed over Autumn 2018.

## Accreditation

We have continued to make steady progress towards a full application for the CoreTrustSeal (CTS), the replacement for the Data Seal of Approval (DSA), throughout 2017/18. The CTS, which provides certification based on the DSA-WDS Core Trustworthy Data Repositories requirements, is intended to replace both the standards outlined for the ICSU World Data System (WDS) and the DSA (see <https://www.coretrustseal.org/about/>). A formal certification process was opened in early 2018 and since that point the ADS has been working towards an application for the new accreditation. It should be noted that while the CTS is similar to the previous DSA, it is much more rigorous, requiring significant updates to current documentation and the formalisation of processes and policies which had previously existed more informally. It is hoped that an application for the new CTS will be completed in early 2019. The ADS continues to hold the latest version of the DSA (2017), with periodic review of self-certification standards Digital Repository Audit Method Based on Risk Assessment (DRAMBORA) (<https://www.repositoryaudit.eu/>) and Trusted Repositories Audit and Certification (TRAC)

(<http://www.dcc.ac.uk/resources/repository-audit-and-assessment/trustworthy-repositories>).

ADS was successfully reaccredited as a MEDIN Data Archive Centre during 2017-18.

## Partnerships

We have continued our involvement in a number of UK networks of digital archives, including the Digital Preservation Coalition (DPC) the Research Data Management Forum, and MEDIN (the Marine Environment Data Information Network). During 2017-18 we investigated photogrammetry dissemination processes as a MEDIN-funded project. The ADS report on the work is published on the MEDIN website.

([http://www.medin.org.uk/medin/sites/medin/files/documents/ADS\\_photogrammetry\\_report\\_final.pdf](http://www.medin.org.uk/medin/sites/medin/files/documents/ADS_photogrammetry_report_final.pdf) ).

The ADS is also a member of the Bedern Group, an alliance of the UK's heritage digital archiving services, convened under the auspices of the DPC. On 30 November 2017 (International Digital Preservation Day) we were pleased to attend the launch of the Bedern Declaration, at the English Heritage offices in York. The Declaration underlines the commitment of the alliance to work together to secure the long term digital preservation of invaluable heritage research data and other digital assets.

At international level we have also supported initiatives to establish digital data archives in other countries, and in 2017 we hosted a training visit by staff from the British School in Ankara, who are setting up their own digital repository. We have also continued to work closely with the Digital Antiquity consortium in the United States, and Julian Richards is a member of the Board of Directors, participating in quarterly meetings via Skype, and an annual face-to-face meeting in Arizona.

## 2. Collections Development

### Significant new collections

#### *Star Carr*



The release of the Star Carr digital collections in 2018 was the culmination of several years of work for the ADS and Star Carr project staff.

Star Carr is arguably the most well known Mesolithic site in Europe. The potential of this area was first discovered by the work of local amateur archaeologist John Moore in the late 1940s, who realised that the flat expanse of peat within the eastern end of the Vale of Pickering had once been an ancient lake, which he called Lake Flixton. Since the Mesolithic period, the lake had infilled with peat

and this had created excellent preservation conditions for the archaeology in this area.

Growing concerns about the stability of organic remains still to be excavated at Star Carr led to further work at the site between 2004-2015. This research, under the direction of Professor Nicky Milner (University of York), Dr Barry Taylor (University of Chester) and Dr Chantal Conneller (University of Manchester), aimed to answer outstanding questions surrounding the physical extent of the site, the environmental context in which human activity was taking place and the rate of deterioration in the preservation conditions at Star Carr. The work was carried out in two main phases: the first phase (2004-2010) was largely exploratory and developed methods and approaches as well as assessing the state of deterioration of the deposits, funded by English Heritage (now Historic England), the British Academy, the Natural Environment Research Council and the Vale of Pickering Research Trust.

The second phase, was funded by the European Research Council (project: POSTGLACIAL) and Historic England. The project centered on the Early Holocene occupation around the edges of Palaeolake Flixton, and featured specific archaeological investigations at the sites of Star Carr (2013-2015) and Flixton Island II (2012-2014). The principal aim of the project was to implement an interdisciplinary, high-resolution approach to understanding hunter-gatherer lifeways within the context of climate and environment change during the early part of the postglacial period (c. 10,000-8000 BC)

This archive provides a hub for the digital archives of the archaeological investigations into the Early Holocene landscape around Lake Flixton, North Yorkshire. It incorporates the site records and reports from the excavations at Star Carr (2004-2015) and Flixton Island (2012-2014) (following the publication of the book). The paper archive and material from the excavation of Star Carr will be deposited with York Museums Trust. The paper archive and material from the excavation of Flixton Island will be deposited with Scarborough Museums Trust.

### *Defended Small Towns of Roman Britain*

The defended small towns of Roman Britain came as a natural follow-up collection to the hugely successful *The Rural Settlement of Roman Britain: an online resource*.

Although the vast majority of the population of Roman Britain continued to live in small rural farmsteads, many larger nucleated settlements developed after the conquest, often sited along the expanding road network. Some of these roadside settlements gained earthwork and/or masonry defences at various points during the mid- to late Roman period, and have often been termed 'defended small towns', although these vary markedly in terms of their scale and in the extent of any 'urban' characteristics (streets, public buildings etc.).

From the outset, for pragmatic reasons, the Roman Rural Settlement Project excluded defended small towns from the database, through a very generous donation by Paul Chadwick later enabled a sample of such data to be collected. Twenty-three defended small towns were included in analyses of the Romano-British economy, lifestyles and ritual practices, published in volumes 2 and 3 of the project's monograph series. A total of 209 records from the 23 settlements are included in this resource.

Additional data were collected for the selected sample of defended small towns, above that collected for the rural settlements. These additional data comprise:

- Coin denominations
- Selected pottery wares
- A division between stone tools, metal tools and knives
- Quantifications of more detailed plant taxa

Data from the 209 records relating to the selected defended small towns can be accessed via the main query page of the Roman Rural Settlement Project <https://doi.org/10.5284/1030449>

### *Crystal Palace Iguanodon condition survey*



The much-loved Crystal Palace Dinosaurs are a collection of thirty-two concrete sculptures, depicting extinct and prehistoric creatures, including the world's first full scale, three dimensional constructions of dinosaurs. Built between 1850-1854, the dinosaurs were commissioned to accompany the Crystal Palace after its move to South east London in the 1850s. This archive focuses on recording the structural condition, specifically the development of cracks in the Standing Iguanodon, arguably the most

iconic of the Crystal Palace Dinosaurs. Over the past 163 years it has been subject to numerous restorations, however deterioration specifically relating to structural issues persists.

By mapping and monitoring the cracks formed since 2015 over a period of three months, this report identifies the patterns and comparative rates of cracking in the Standing Iguanodon. The monitoring programme revealed damage caused by ground subsidence. The

measurements revealed an increase in dimensions, at points, to 41% of the cracks over a 3-month monitoring period. Measures to stabilize the ground beneath the sculpture are recommended.

### **New Collections Released**

In total 314 archive collections were added in 2017-18. Of these, 269 represent single collections with the remaining 45 collections were part of the Birmingham Archaeology (BUFAU) Digital Archives project (a large recovery project following the closure of Birmingham Archaeology in 2012).

This represents a very significant increase in archive numbers from 2016-17 period. However, it should be noted that a significant number of these, 180, are OASIS images archives. These small collections are made up of a grey literature report and a small quantity of digital photography only. In 2017/18 it was noted that the OASIS images collections were not arriving with the ADS in the way anticipated when the system was first designed (it was intended that collections should arrive in batches of 10) and it was not therefore cost-effective to continue the system in the same way. Notice was given to archaeological contractors that a price increase would take effect from 1<sup>st</sup> April 2018. This led to a significant influx of projects in the period March-June 2018, effectively inflating the figures that would usually be expected.

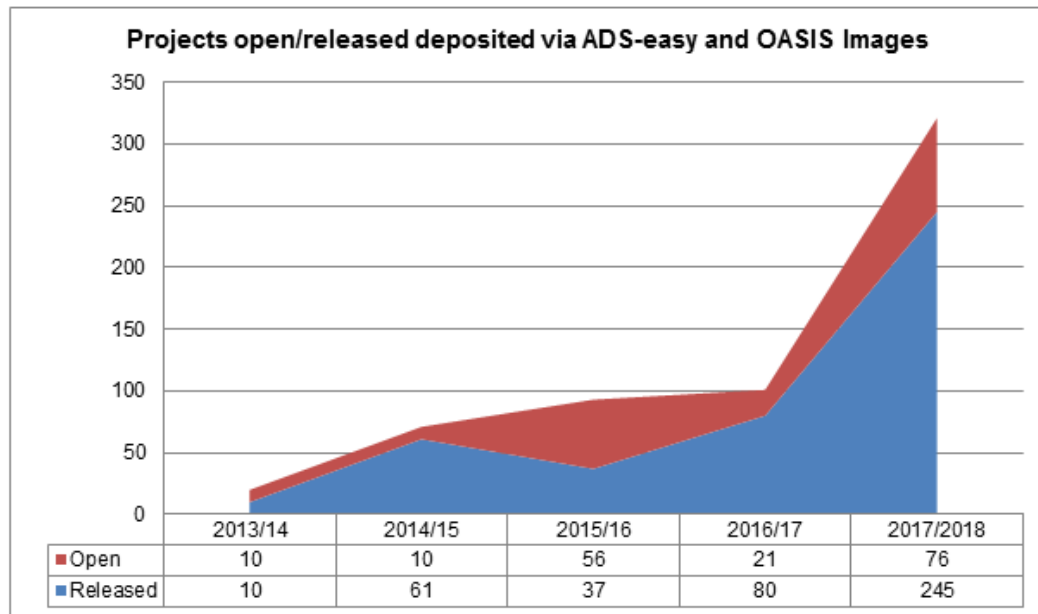
A list of new archives released, journal collections and existing archives that were added to and/or updated can be found in Appendix D.

### **ADS-easy and OASIS Images**

Reflecting the trend of previous years the profile of both ADS-easy and OASIS Images has continued to increase throughout 2017/18. The number of registered users has risen to 330, while the number of active users depositing data has risen to 149 individuals. This reflects favourably on the number of individuals completing depositions which has risen to 84, representing some 57 discrete organisations. Much like previous years deposits from commercial and developer funded projects predominate, but a small and steady number of small academic archives have also been submitted.

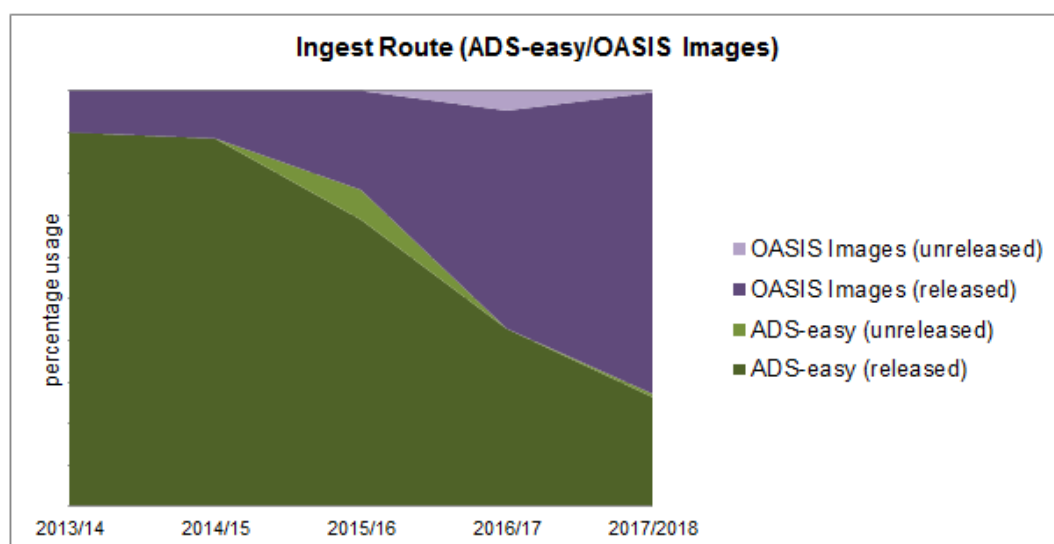
As noted above, there has been a sharp increase in the number of archives submitted through both the ADS-easy and OASIS Images portals, with some 245 archives deposited and accessioned throughout the year. Of these a significant proportion were derived from OASIS Images. Much like previous years there still remains concern over the number of archives which are started but not completed within both systems, although in part this can be attributed to depositors attempting to deposit data that is inappropriate, due to size or data type, for ADS-easy. At the same time this may also reflect duplication of archives due to human error and problems with the upload process (in OASIS Images). It is hoped that improvements to the system currently being carried out will help improve user experience.





The trend noted in 2016/17, which saw a rise in the use of OASIS Images and a decrease in use of ADS-easy, has continued into 2017/2018. This growth must also be offset against the associated impact of the increased charging for OASIS Images in April 2018 and the resulting ‘amnesty’ on those collections submitted before June 2018 (as noted above). Significantly the number of incomplete/ unreleased archives (following accession) fell markedly.

Updates to the online costing calculator made during the autumn of 2017, to bring it in line with changes to the ADS Charging Policy, were implemented in late October 2017. With additional amendments made to the OASIS Images portal during February 2018, reflecting the changes outlined above (see New Collections Released), which also took into consideration the associated increase in deposition size (increased from 50 to 150 images). Annual maintenance of the ADS-easy system was carried out during the summer of 2018, including work to legislate for changes in accepted formats, processes and additional metadata that have been agreed in the last year or so. Upgrades were also made to the ADS-easy interface to improve user experience with technical changes to increase session time and accepted file sizes in order to make the portal more flexible.



### ADS Library

The ADS Library currently holds 317,156 records, of which 78,370 are available as downloads from the ADS, 11,015 are linkable externally and 206,428 are bibliographic records.

### Grey Literature

In 2017-18 the ADS archived 4,524 grey literature report files via OASIS, adding 4,184 OASIS records to the ADS Library.

Finally during 2017-18, major archives resulting from the Crossrail programme were accessioned from MOLA and Wessex Archaeology and will be released during 2018-19. In addition, two meetings were held with representatives of HS2 to make preparations for the archiving and dissemination of fieldwork reports and research data arising from the programme of fieldwork in advance of this major infrastructure project, and a business case was prepared in support of HS2 direct funding for ADS staff.

### Journal Collections

Several new and significant journal collections were negotiated and added in the 2017-18 period. These included the publications of the *Medieval Settlement Research Group*, *The Forth Naturalist and Historian Journal* and the *Chester Archaeological Society Journal*.

## 3. Resource Delivery

On 16 January the ADS Library was moved out of its Beta phase and became a fully operational service. Concurrently we launched a newly designed website. The main aim of the new website design is to make it easier for our users to access our searchable resources. With the launch of the ADS Library the ADS now provides three main heritage environment search tools: ArchSearch, the ADS Archives, and the ADS Library. Each of these tools should be used to search for different types of information held by the ADS. Archsearch is for searching metadata records about monuments and historic environment events in the UK. The ADS Archives is the place to search for historic environment research data (such as images, plans, databases) and contains international and UK data. The ADS Library is a bibliographic tool for



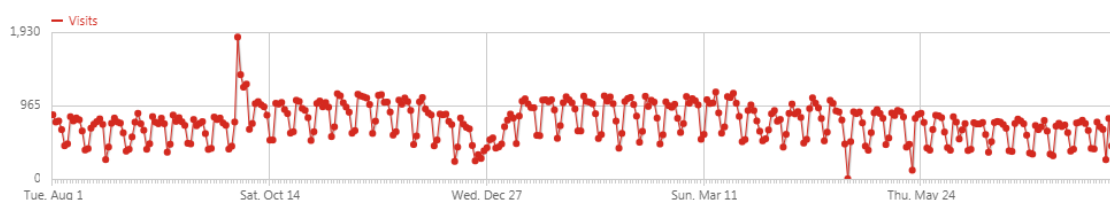
searching for written records on the historic environment of Britain and Ireland. Where possible, the record provides a direct link to the original publication or report.

In order to make the differences between these search tools clear to users, and to make all three tools easy to find from our main website, we introduced a new website menu with drop-down links that enable a user to go straight to each of our search resources. Users will also be given the option to access a main search page which explains the differences between each of the available search options, and allows the user to choose which resource to search.

We also took the opportunity to redesign the layout of our website, creating a bold new home page, designed to better highlight our featured collections and news items, while providing links to our new search and deposit pages. Our new Deposit page will also provide clearer links to the different types of data deposit options available to researchers wishing to archive data with the ADS. Our new About page provides clear links to our operations policies and details of our governance. The new design has reduced the number of main tabs in the menu, but the introduction of a drop-down menu feature means that, in practice, more pages are directly accessible than previously. Overall the new design surfaces the most important pages of our website better and make our key resources accessible via fewer clicks.

The ADS had **332,332** unique visitors in 2017/18 to its services. The following table highlights the unique visits to each service:

| SERVICE                                     | VISITS  | PAGE VIEWS |
|---|---------|------------|
| ADS web pages (i.e. advice, research, blog) | 19,963  | 213,741    |
| Archsearch                                  | 32,460  | 288,642    |
| Archives                                    | 218,913 | 1,402,250  |
| Library                                     | 43,550  | 254,172    |
| Guides to Good Practice                     | 10,965  | 26,654     |
| ADS-easy                                    | 2,497   | 19,140     |
| Research Frameworks                         | 3,979   | 17,510     |
| ALL   | 332,332 | 2,222,109  |



The graph above shows the pattern of visitors to the ADS across the 2017/18 year. The graph below represents the location ADS visitors with 66.6% of visitors coming from the UK, 9.4% from the US, 2.8% from Italy.



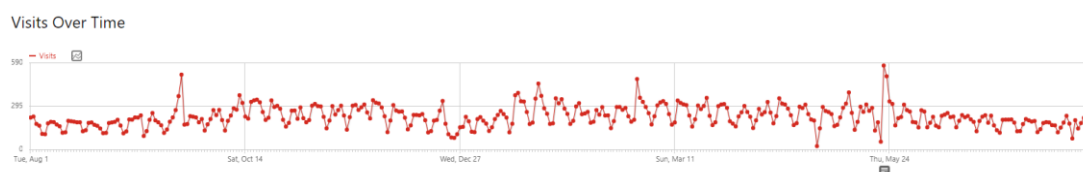
### Internet Archaeology usage statistics

The journal served 81,407 unique visits during the report period. In total, the journal received 333,080 pageviews, 220,269 of these being unique pageviews. It receives on average 290 visits a day (up from c.250 in previous year).

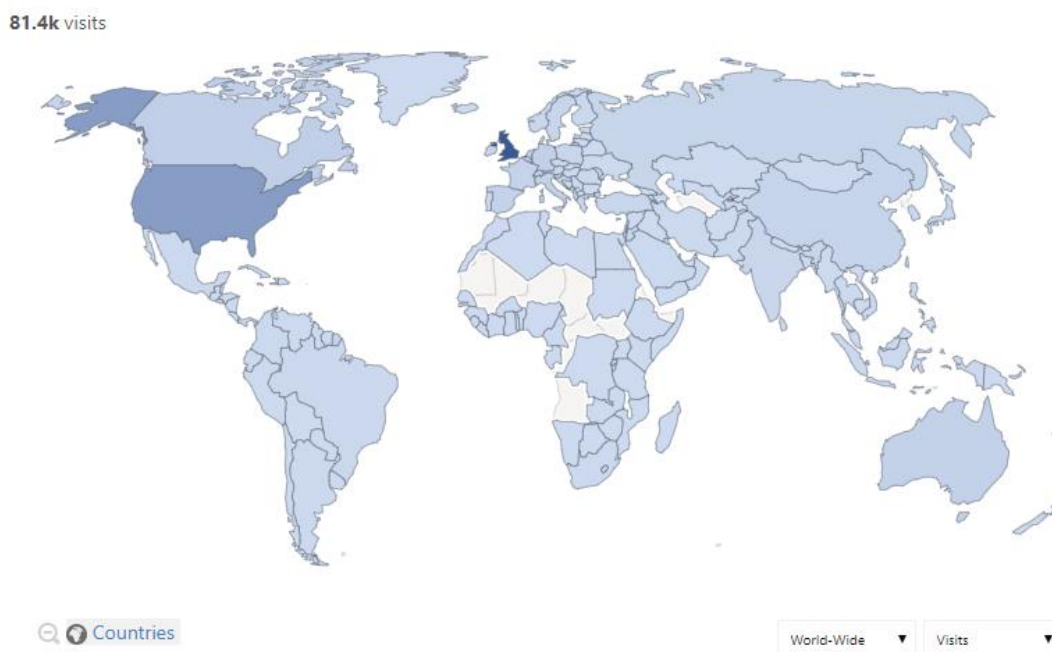
| Date      | Visitors (Pageviews) |
|-----------|----------------------|
| 2016-2017 | 80,700 (328,202)     |
| 2017-2018 | 81,407 (333,080)     |

Announcements of new articles cause a spike in usage e.g. Issue 50 release at the end of May 2018 had almost 600 visits in one day, although the notable spike in September 2017 was due to a re-post/reminder via social media of the Digital Creativity issue published earlier in June.

Visits to each page on average still remain around 3 mins 30 secs. Given that articles are made up of several interlinking pages, this seems to indicate that where users are staying on the site, they are spending time reading and exploring content.



The graph above represents the overall number of visits to the journal over the 12 month period. The majority of journal users come from English speaking countries: UK 39% (44.9%), North America 18% (16.1%), followed by Canada 2.9% (2.4%), Germany 2.8% (2.6%), Italy 2.6% (2.6%) and Australia 2.5% (2.6%).



#### 4. Electronic Publications

It has been another busy year for *Internet Archaeology* - both in terms of the number of enquiries and article/themed issue proposals received. The impact of activities arising from the PUBLICAN project have started to be felt with two publications coming from the commercial sector as well as proposals for at least two more. The editor has also represented the journal at a series of national conferences including ClfA (Brighton).

*Internet Archaeology's* income stream remains a mix of APCs, project income and advertising. During 2017-18 APCs have come from a range of sources, many of them for the first time, including the University of Leicester, University of Leeds, University of Uppsala, Historic England, Cotswold Archaeology, CADW, and the European Archaeological Council.

Our joint donations campaign <http://intarch.ac.uk/about/donate.html> has raised £1168 in this reporting period (in addition to c£1000 last year). The fund has the specific aim of supporting the publishing and archiving costs of researchers who have no means of institutional support.

Since the last report, *Internet Archaeology* has closed issue 45 and published a further 5 issues (although Issue 47, as the mixed issue for 2018, will remain open until the end of December 2018. Seven articles have been published within the reporting period) and functionality has included the use of an SVG viewer, embedded video and the 3D hop viewer.

This year also sees our second publication by a commercial unit, Cotswold Archaeology, and enquiries and discussions have started with other units regarding publications (Wessex Archaeology and Cambridge Archaeological Unit).

**Issue 45 partial** (rest of issue in previous reporting period)

- 'Gratefully dedicated to the subscribers': The archaeological publishing projects and achievements of Charles Roach Smith - Sarah Scott
- A Review of 'Mid Republican House from Gabii' [digital publication] - Emma Jane O'Riordan
- Review of Pocket Guide Megaliths [app] - Barney Harris

**Issue 46. Digital Co-Production in Archaeology. A themed issue**

- Digital Co-Production in Archaeology. An editorial - Chiara Bonacchi and Bodil Petersson
- Unintended Collaborations: interpreting archaeology on social media - Chiara Zuanni
- Creating Ambassadors Through Digital Media: reflections from the Sandby borg project - Ludvig Papmehl-Dufay and Ulrika Söderström
- Pararchive and Island Stories: collaborative co-design and community digital heritage on the Isle of Bute - Paul R.J. Duffy and Simon Popple
- Contract Archaeology, Social Media and the Unintended Collaboration with the Public — Experiences from Motala, Sweden - Göran Gruber
- Virtual Bodies in Ritual Procession — Digital co-production for actors and interpreters of the past - Magali Ljungar-Chapelon
- Public Archaeology 2015: Letting public engagement with archaeology 'speak for itself' - Lorna-Jane Richardson and James Dixon

**Issue 47 (2018 issue still open)**

- Recent Investigations at Two Long Barrows and Reflections on their Context in the Stonehenge World Heritage Site and Environs - D. Roberts , A. Valdez-Tullett, P. Marshall, J. Last, A. Oswald, A. Barclay, B. Bishop, E. Dunbar, A. Forward, M. Law, N. Linford, P. Linford, I. López-Dóriga, A. Manning, A. Payne, R. Pelling, A. Powell, P. Reimer, M. Russell, F. Small, S. Soutar, J. Vallender and F. Worley
- A Medieval Building and its Contents at Island Farm, Ottery St Mary, East Devon: excavations in 2014 - Andrew Mudd, Sarah Cobain and Charlotte Haines
- "But will there be visitors?" Public outreach efforts using social media and online presence at the Côa Valley Museum and Archaeological Park (Portugal) - António Batarda Fernandes
- 'The Rise of the Machine': the impact of digital tablet recording in the field at Çatalhöyük - James Taylor, Justine Issavi, Åsa Berggren, Dominik Lukas, Camilla Mazzucato, Burcu Tung and Nicoló Dell'Unto
- Putting the Palaeolithic into Worcestershire's HER: An evidence base for development management - Oliver Russell, Nicholas Daffern, Emma Hancox and Aisling Nash
- Kuwaiti Youth Attitudes toward Archaeology - Majed Almutairi
- HHARP: The Historical Hospital Admission Records Project — a review [website] - Cara Hirst

#### **Issue 48. Iron Age Settlement in Wales - a themed issue**

- Editorial - Ken Murphy
- A Brief Introduction to Iron Age Settlement in Wales - Matthew Ritchie
- Historical Excavation and Survey of Hillforts in Wales: some critical issues - Graeme Guilbert
- Humans and Landscape - Astrid Caseldine
- The Atlantic Coast - Ken Murphy
- Hillforts and Hut Groups of North-West Wales - George Smith
- Hillforts and Defended Enclosures of the Welsh Borderland - W.J. Britnell and R.J. Silvester
- Romano-British Settlement in South-East Wales - Edith Evans
- New Perspectives on the Architecture and Function of Welsh Hillforts - Toby Driver
- The Iron Age Today - Harold Mytum

#### **Issue 49. Dare to Choose — Making Choices in Archaeological Heritage Management. EAC symposium proceedings**

- Foreword. Dare to Choose — Making Choices in Archaeological Heritage Management - Leonard de Wit
- Introduction - Ann Degraeve
- Making Choices: Valletta, Development, Archaeology and Society - Barney Sloane
- Managing Greece's Underwater Archaeological Heritage - Angeliki G. Simosi
- Making Choices — Making Strategies: National Strategies for Archaeology in Denmark - Thomas Roland
- Dare To Lo(o)se - Gábor Virágos
- 'Do I really need to dig it?' — Making Choices in Development-led Archaeological Excavation in Northern Ireland - John D.J. O'Keeffe
- A Toolbox for Archaeological Heritage Management. Maps, Methods and More for Effective and Efficient Selection of Valuable Archaeology -
- R.C.G.M. Lauwerier, M.C. Eerden, B.J. Groenewoudt, M.A. Lascaris, E. Rensink, B.I. Smit, B.P. Speleers and J. Van Doesburg
- Is Question-driven Fieldwork Vital or not? An Archaeological Heritage Manager's Perspective - Agnieszka Oniszcuk
- To Treat or not to Treat...Insights into the Strategic Decision-making in the Archaeological Conservation and Restoration Laboratory of the Brussels Capital Region, Belgium - Ann Degraeve and Jef Pinceel
- Management Plans: A Tool for Participative Decision-making - Elena Kountouri, Constantina Benissi and Julia Papageorgiou
- Three for One: Analysis of Three Differing Approaches to Developing an Archaeology Strategy - Mary Teehan, Rebecca H. Jones and Mike Heyworth
- Steps towards Public Engagement with Archaeological Heritage — Some Portuguese Examples - João Marques and Filipa Neto
- The Relevance of Professional Ethics of Archaeologists in Society - Sandra Zirne

#### **Issue 50. Big Data on the Roman Table: new approaches to tablewares in the Roman world**

- An Introduction to a Research Network: the rationale and the approaches - Penelope Allison
- Form Follows Function. A new approach to determining vessel function - Vincent van der Veen

- Domestic Patterns of Tableware Consumption in Roman Celtiberia - Jesús Bermejo Tirado
- Calculating Liquid Capacity to Understand what could have been Consumed from 'Drinking' Vessels - William Baddiley
- The Uses of South Gaulish Terra Sigillata on the Roman Table. A study of nomenclature and vessel function - Geoffrey Dannell
- Pottery Function, Dining and Funerary Assemblages. A comparative study from northern Gaul - Alice Dananai and Xavier Deru
- From Table to Grave: Examining Table Settings in Roman Britain from Funerary Evidence - Edward Biddulph
- A Terra Sigillata Revolution? Terra sigillata consumption in first-century AD Roman Mediterranean Gaul - Benjamin P. Luley
- From the Spreadsheet to the Table? Using 'spot-dating' level pottery records from Roman London to explore functional trends among open vessel forms - Michael Marshall and Fiona Seeley
- Eating In and Dining Out in Roman Leicester: Exploring pottery consumption patterns across the town and its suburbs - Nicholas J. Cooper, Elizabeth Johnson and Martin J. Sterry
- Exploring Automated Pottery Identification [Arch-I-Scan] - Ivan Tyukin, Konstantin Sofeikov, Jeremy Levesley, Alexander N. Gorban, Penelope Allison and Nicholas J. Cooper
- Measuring Usewear on Black Gloss Pottery from Rome through 3D Surface Analysis - Laura M. Banducci, Rachel Opitz and Marcello Mogetta
- Building an Ontology of Tablewares using 'Legacy Data' - Daniël van Helden, Yi Hong and Penelope Allison
- Classifying and Visualising Roman Pottery using Computer-scanned Typologies - Jacqueline Christmas and Martin Pitts
- Multivariate and Spatial Visualisation of Archaeological Assemblages - Martin Sterry
- Was there a Difference between Roman 'Civil' and 'Military' Samian (terra sigillata) Market Supply? Finding answers with statistical distribution analysis methods - Allard Mees
- Early Imperial Tableware in Roman Asia Minor: a perspective on the diachronic patterns and morphological developments - Rinse Willet
- How were Imitations of Samian Formed? - Tino Leleković
- Big Data Analyses of Roman Tableware: information standards, digital technologies and research collaboration - Sarah Colley and Jane Evans
- The Echo of Past Choices: The Roman dining table under twenty-first century scrutiny - Steven Willis

## 5. Resource Discovery

The table below gives a summary of our aggregated records, external data sources and consumers of our web services:

| Service            | Current Count |
|--------------------|---------------|
| ArchSearch records | 1,617,030     |
| OAI-PMH Targets    | 4             |

| Service   | Current Count |
|---|---------------|
| Web Mapping Services (WMS) in Heritage Gateway  | 9             |
| External APIs used<br>(DataCite, Heritage Data, Google Maps, Open Street Map)   | 4             |
| External Aggregators<br>(ARIADNE, EUROPEANA, UKRDDS, MEDIN, DES, HERITAGE GATEWAY, Keeper's Registry, MOLA, EXlibris) | 9             |
| Linked Data Triples   | 2,531,302     |

Our ArchSearch records increased by 264,000 from August 2017 to September 2018. There were no changes to our OAI-PMH targets, Web Services or Linked Data during that time.

## 6. Advisory Services

### *Number of projects and funding applications seeking advice*

| Organisation        | Number of applications or projects consulted on | Direct input to application – e.g. technical plan advice. |
|---------------------|---|---|
| AHRC                | 14  | 8   |
| NERC (inc. MEDIN).  | 3   | n/a (1 new ODMP discussed)                                |
| ERC                 | 1   | 1   |
| Leverhulme Trust    | 1   | 0   |
| British Academy     | 3   | 0   |
| Marie Curie         | 1   | 0   |
| Private Foundations | 2   | 0   |

Note: Figures indicate projects or applications that commenced in the accounting period. Numerous projects run over several accounting periods, with advice being given at the application stage and throughout the life of the project.



## Workshop, Training events and University visits

### *Digital Data & Archaeology, Management, Preservation and Publishing of Digital Data for Archaeologists Workshop, Leicester*

This workshop was part of the Heritage Practice training courses run in partnership with Historic England and the University of Leicester. It aimed to provide data creators and curators with the essential knowledge and skills necessary to carry out digital preservation and data management. The workshop was held on the 31 September to 1 of October 2017, had full attendance with 20 students and we received excellent feedback. The course featured speakers from ADS, Internet Archaeology and Historic England who highlighted the importance of digital preservation and data standards in archaeology, introduced best practices for data creation and management, and interrogated case study examples of digital archives.

### *Selection and Retention for Archaeological Archives. ClfA Conference, Brighton*

This workshop, organised by the CIFA AAG, was a CPD session held at the CIFA annual conference. This was part of the Selection for Archaeological Archives Project funded by Historic England. The workshop introduced the Selection Toolkit to the sector and train the tools.

### *Intro to the ArchAIDE project. ClfA Conference, Brighton*

This workshop, organised by the ADS, was a practical introduction to the ArchAIDE project and App at the CIFA annual conference.

### *Data Management for Archaeologists. ClfA Conference, Brighton*

This workshop, organised by the ADS, was a CPD session held at the CIFA annual conference. It aimed to provide data creators and curators with the skills to carry out data management. The workshop was well attended and featured speakers from ADS and Historic England who highlighted the importance of digital preservation and data standards in archaeology, introduced best practices for data creation and management, and interrogated case study examples of digital archives.

### *ClfA Buildings Archaeology Group Meeting, Cressing Temple, nr Chelmsford*

A one-day workshop arranged by ClfA BAG. Louisa Matthews presented *“Built Legacy: Preserving the results of historic building investigations with the Archaeology Data Service”*

ADS staff gave lectures or seminars at the following universities over the past year: Bradford, Sheffield and York. The number of visits has reduced from previous years due to other constraints of staff time. A work pack is available and is kept up to date, which includes a presentation on ADS, Data Management and Digital Archiving, a step-by-step workbook that guides a student through ADS resources and a data management plan workbook for postgraduates.

A full list of conferences, workshops and other significant meetings attended is available in Appendix E.

## 7. Standards

### Partnerships

Development of data standards requires partnership across the heritage sector and we have continued to work with other heritage information bodies via FISH (the Forum for Information Standards in Heritage), HEIRNET (Historic Environment Information Resources Network), and the AAF (Archaeological Archives Forum).

The ADS is also a key partner in the development of England's Heritage Information Access Strategy (HIAS) and a member of the Advisory Board. We are leading the 'Collecting and Validation' work package, which incorporates the redevelopment of OASIS as part of the HERALD project (see below).

### New Documentation

Work alongside HES and RCAHMW has continued on developing a comprehensive metadata specification for laser scan and photogrammetric datasets. It is planned to trial and release the current specification before the end of 2018.

Kieron Niven has represented ADS within the CS3DP group (Community Standards for 3D Data Preservation), attending a conference in Ann Arbor, which will enable us to update these sections of the G2GP. He has also developed internal procedures for the deposit and archiving of X-ray/CT scan data.

## 8. Re-use: Publicity and promotion

### Newsletter

**Issue 30** of the ADS hardcopy newsletter was published in April 2018. Over **400** copies have been distributed to university archaeology departments, Historic Environment Record (HER) offices, major archaeological services and key ADS stakeholders with additional copies being distributed during conferences, seminars and workshops.

### Email Lists

The ADS general list [ads-all@jiscmail.ac.uk](mailto:ads-all@jiscmail.ac.uk) was discontinued in March 2018 in light of our GDPR audit (see details below) and all contact details deleted. Following our GDPR email campaign we now have a subscription list of 2060 individuals, which is higher than the old jisc-mail list.

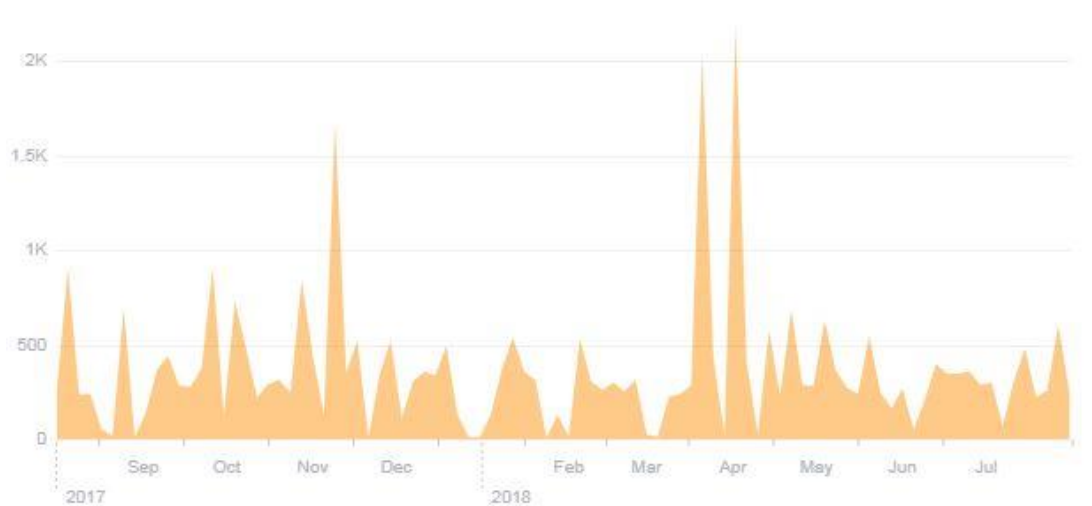
*Internet Archaeology's* email list [intarch-interest@jiscmail.ac.uk](mailto:intarch-interest@jiscmail.ac.uk) is used by the editor to promote the journal and its activities as well as to announce new content. Membership remains steady at around 300 as followers switch to social media for their updates.

### Social Media

The ADS social media strategy revolves around three main services; Facebook, Twitter (two accounts), and Wordpress. *Internet Archaeology's* social media outlets include a Facebook account and Twitter.

### Facebook

The ADS Facebook account posts information on all new archive releases, featured collections, ADS events, news items and blog posts related to ADS. The Facebook account is also used to share relevant news from *Internet Archaeology* and our project partners. The account currently has **2423 followers**, an increase of **257** from last year. The average reach for our posts is 300, with a high of 7577.



*Graph showing daily interaction with ADS facebook posts.*

The top 3 most popular posts were all #Fridayphotos:

1. **#FridayPhoto** Excavations of the Hilton of Cadboll Pictish cross-slab. This slab is thought to have been erected at the Chapel site on the east coast of **#Easter Ross** in the late 8th century AD. The project was funded by **Historic Scotland**. [doi.org/10.5284/1000085](https://doi.org/10.5284/1000085) (30/03/18, 7577 reached, 1.1k clicks).
2. **#Fridayphoto** Today's Friday photo is not an image but an X-ray scan of finds from a grave in a Viking-age cemetery at Cumwhitton. Six burials were found at this site, all dating to the early tenth century, though almost no skeletal material survived because of the acidic nature of the soil. [doi.org/10.5284/1031499](https://doi.org/10.5284/1031499). (15/08/17, **4775** reached, 18 clicks)
3. **#FridayPhoto** This week's Friday photo is not an image but a GIS drawing of a central henge. This is part of the supplement material for the published report on archaeological investigations at the Neolithic Bronze Age monument complex of Thornborough, North Yorkshire. [doi.org/10.5284/1020064](https://doi.org/10.5284/1020064). (20/04/18, **3714** reached, 329 clicks)

The majority (30%) of ADS Facebook followers are in the 25-34 age bracket, closely followed by the 35-44 age group (25%). The vast majority of those who follow the page are from the UK, closely followed by users from the US, then Italy.

*Internet Archaeology's* Facebook page currently has **5091** followers (**4795** in previous year). It is used to promote new content as well as highlighting content from earlier issues and a regular #FridayPhoto. The majority of followers come from USA and then closely followed by UK.

Graph showing daily interaction of IA Facebook posts



### Twitter

The Twitter accounts largely mirror the Facebook posts (albeit occasionally shorter) and see frequent re-tweets, highlighting that daily communication is key to growing engaged followers.

**@ADS\_Update** has **5750** followers on Twitter; up from **5037** in 2016/17. On average, tweets from the account are clicked on 3 times per day.

#### Twitter Impressions earned (@ADS\_Update)

|                |         |
|----------------|---------|
| August 2017    | 33.9k   |
| September 2017 | 26.3k   |
| October 2017   | 28.3k   |
| November 2017  | 54.4k   |
| December 2017  | 44.8k   |
| January 2018   | 47.5k   |
| February 2018  | 35.4k   |
| March 2018     | 34.7k   |
| April 2018     | 45.4k   |
| May 2018       | 42.1.2k |
| June 2018      | 42.0k   |
| July 2018      | 33.0k   |

*The top 3 tweets for the 2017/18 period were:*

1. NEW RELEASE: A46 Newark to Widmerpool Road Improvement scheme (2009) [@CotswoldArch](#) [@wessexarch](#) [@HighwaysEngland](#), link clicks, 24 likes, 7 retweets, 325 total engagement.
2. NEW RELEASE: Defended Small Towns of Roman Britain A total of 209 records from the 23 settlements are included in this resource. [@CotswoldArch](#) [@UniofReading](#). 75 link clicks, 21 likes, 14 retweets, 216 total engagement
3. [.Fridayphoto](#) Mound 6 and 7 before excavation, Sutton Hoo. This photo was taken in 1988. [@NT\\_SuttonHoo](#) 25 link clicks. 19 retweets. 58 likes. total engagement 203.

**@Intarcheditor** has **13.4k** followers on Twitter, up from **11.6k** last year and is used both to promote past and existing journal content, as well as for conference tweeting, engaging in conversation and posting links about e-publishing and open access publishing more generally.

#### *Twitter Impressions earned (@IntarchEditor)*

|                |        |
|----------------|--------|
| August 2017    | 21.9k  |
| September 2017 | 36k    |
| October 2017   | 39.9k  |
| November 2017  | 72.5k  |
| December 2017  | 66k    |
| January 2018   | 55.6k  |
| February 2018  | 49.1k  |
| March 2018     | 40.8k  |
| April 2018     | 37.3k  |
| May 2018       | 118.2k |
| June 2018      | 62.2k  |
| July 2018      | 30.1k  |

#### *Wordpress Blogs*

**ADS** manages four blogs, **ADS Sound Bytes**, the **ADS-easy blog**, the **OASIS blog**, and the **Day of Archaeology** blog.

The ADS Blog ‘Sound Bytes’ acts as a platform for ADS staff to write short articles discussing technical issues as well as disseminating updates on ADS research activities. The OASIS blog is currently being used to disseminate the results of the HERAL project. Over the past year **10** articles have been published covering a variety of topics from competitions and awards to technical commentary via these two blogs.

Piwik web analytics show that the blog has had **2089** unique page views over the last year. The most popular blog post was Meet the Open Access Archaeology Fund Winner! with **135** unique page views.

#### **Selected user comments on ADS**

“Hello! Your service is a tremendous boon to scholars and bibliographers, and I’m very grateful to be able to find so much online.” (Email 24/07/2018).

“thanks so much for this, I’m sure I can do something with it which will be useful for the students. we had a session on the new website last week – it worked really well!” (Email 31/01/2018)

“Thank you for taking the trouble to help me find this elusive article.” (Email 12/10/2017)

“@ADS\_Update once again wins the prize for some of the best digital archives with some of the most prosaic titles.” (Twitter, 27/01/2018).

“Yes! @ADS\_Update is amazing and super helpful!” (Twitter, 01/02/2018).

“We are big fans of supporting dissemination of #archaeological and #heritage information! @ADS\_Update is a huge help with their digital archiving services.” (Twitter, 08/02/2018).

“El archivo de @ADS\_Update es un ejemplo repositorio científico con un exquisita curación de datos.” (Twitter, 12/02/2018).

“Shucks @ADS\_Update, you and all your free easily accessible #Archaeology #data - of course we ❤️ you!” (Twitter, 13/03/2018).

“We definitely are @ADS\_Update! Thanks for all the great work you do, getting our reports online. (Twitter 28/03/2018).

“Just want to say that when writing up reports and tracking down often obscure publications (including county society volumes and grey literature), even from the comfort of my office chair, @ADS\_Update is an absolute godsend!” (Twitter 05/05/2018).

“This [ROMAN AMPHORA] digital resource solved my archaeological life many times @ADS\_Update” (Twitter 05/05/2017).

“Great use of @ADS\_Update today. [re CAS proceedings)” (Twitter 23/06/2018).

“I would love to see this rolled out with more pages over time. Such as collections of British artefacts such as Neolithic pottery” (August 2018 survey responses to the online gallery launch).

“It's great -well done!” (August 2018 survey responses to the online gallery launch).

“Would just be interested in rolling out more projects in this format, as there are so many reports that could be combined by site”

(August 2018 survey responses to the online gallery launch).

## GDPR

The General Data Protection Regulation (GDPR) came into force on 25 May 2018. The work required to ensure that the ADS was GDPR compliant before this date was extensive. This included an audit of all the personal data that the ADS holds for business purposes and the potential for personal data to be held in our archives. The following actions were undertaken as a result of the audit.

- Compile Data Protection Impact Assessments for ADS and IA systems.
- Update Deposit Licences to include GDPR.
- Update some SLAs to include GDPR.
- Write Retention Policy for personal data.
- Update Privacy Policy for ADS website and associated sites (G2GP, wikis), *Internet Archaeology*, C14 system, and OASIS
- Update Cookie Policy for ADS, OASIS, IA.
- Add cookie statement pop-up to all domains, requiring 10 different instances of the pop-up across the ADS systems due to different server requirements.
- Migrate Piwik statistics to new server, reset IP collection level.
- Update ADS-easy registration application to include appropriate privacy notices, consent tick boxes and information on how to unregister.
- Update OASIS registration and OASIS form so that it has appropriate privacy notices and consent tick boxes during personal data input.
- Update C14 system to include appropriate privacy notices.
- Update wiki registrations to include appropriate privacy notices and consent tick boxes, and information on how to unregister.

- Contact our different users about our new privacy policies. Over 9000 emails sent, this require a script to be wrote to, attempt to remove duplication and multiple emails, implement the mass mailings and record the responses to the emails.
- Implement new mailing list subscriber management system.
- Set up Footprints to manage our helpdesk accounts.
- Delete any electronic personal data that we have no legal basis for keeping, i.e. random contact lists (organisation contact details are ok), myADS contacts, old survey data, old subscriber data for IA, etc.
- Audit email correspondence delete emails according to retention policy. Audit out of data personal data in OASIS, ADS-easy, Wikis and delete accordingly.
- Audit all our security measures, i.e. pseudonymisation for people and passwords in databases.
- Update our Security Documentation.
- Update Advice and Guidance documents for depositors.
- Train ADS staff in GDPR.

## 9. Research and development

### HERALD

HERALD is the overarching title given to a 3-stage project, funded by Historic England (HE), covering the redevelopment of the OASIS form and the creation of a new ADS Library. An associated project funded by Historic Environment Scotland (HES) is enabling the redeveloped OASIS system to facilitate DES reporting for Scotland, and distinct functionality for Scottish specific workflows in the form.

In January 2018 work was completed on the ADS Library, which successfully merged the contents of BIAB, the ADS' holdings of unpublished fieldwork reports, the ADS' holdings of Journals and Monographs and exports provided by commercial publishers. The system supports the ability for registered users to edit and - once verified - to create their own records, either singly or using a template for a batch of records. The latter is a key development to expedite the transfer of information into the Library by publishers such as Local Societies. A great deal of work has been done on rationalising records, organisations and individuals. At the time of writing the Library is actively being used for reports transferred from OASIS, and new collections of published material from longstanding depositors such as the *Proceedings of the Society of Antiquaries Scotland*, and new depositors such as the *Forth Naturalist and Historian Journal* and *Journal of the Chester Archaeological Society*.

The creation of the Library led to a re-assessment of the complexity and timings of the tasks required for the main phase of work on the redevelopment of OASIS. A new time table for development was agreed via project variations with HE and HES, with a new schedule for release of the public Beta in **March 2020**. Work on the redevelopment started in earnest in March 2019, with a designated OASIS Application Developer (Jo Gilham) supported by Tim Evans as HERALD Project Manager and the wider ADS Management and Application Development team.

Key tasks undertaken so far has been the construction of the new OASIS database (In PostgreSQL), application framework (i.e. the actual OASIS form) and login module. The redevelopment of the form contains a number of key - if complex - developments that will vastly increase the user experience of the system, these include the capacity for a single individual to belong to various organisations and have the ability to perform different roles



(e.g. data inputter, reviewer, museum). Early stages of 'pre-alpha' testing of the nascent systems have recently been completed, and work on the first full iteration of the new form is scheduled for delivery in March 2019.

In addition, a new project '*OASIS: highlighting historic success and future potential*' funded by Historic England was begun in March 2018. This project will undertake a number of tasks designed to increase the heritage community's knowledge of the redevelopment of OASIS, highlight the successes of the old system, and undertake a survey of the community to assess the range of tools, methods and strategies required for future training and communication. This will be achieved by incorporating a mixed strategy of digital products, talks and presentations, paper-based communications, and collaborations. The anticipated products will be a revitalised online project presence, a package of communication and engagement tools that can be used to promote the new OASIS system, and a series of recommendations for the training needs for the public rollout of the new system.

More information on the progress of HERALD can be found on the relevant section of the OASIS wiki (<http://oasis.ac.uk/pages/wiki/HERALD>), and the [OASIS blog](#) is being updated on a regular basis.

### **DEBS (Discovering England's Burial Spaces)**

Discovering England's Burial Spaces (DEBS) is a Historic England-funded project based at the ADS which started in September 2017. The aim of the project is to develop six new tools for burial space research and dissemination:

1. A website for burial space researchers, providing guidance for research project development.
2. A Burial Space Research Database: A pilot for a national burial space for research archives.
3. Standardised vocabulary for describing burial spaces. This builds on the work of Harold Mytum (2000) *Practical Handbook: Recording and Analysing Graveyards*. CBA.
4. Training materials for groups embarking on a research project or preparing existing data for archiving.
5. Desktop software and a mobile app to use for fieldwork recording and data entry.
6. An OASIS+ form for burial spaces.

Over eighteen months, we will be working with several groups and societies to design and test training and recording materials that can be used to record burial spaces such as churchyards and cemeteries. We are creating a pilot national database for burial space research, so that groups conducting work at burial spaces can safeguard their research in perpetuity and share findings with other researchers.

The Burial Space Research Database will be created as a way to provide groups conducting research into burial spaces to share their findings and publish results, whilst also using standardised recording methodologies and vocabularies. This will mean that datasets being created by groups are interoperable and connections can be made between research projects.

Using a national system for recording burial spaces will enable groups involved in high quality research to publish findings in a recognised format. The Burial Space Research Database development will also support the creation of a new online form that can be used to add a record of research conducted to OASIS. Using OASIS, heritage bodies and organisations that

care for burial spaces, such as Church Care and Historic Environment Record officers, will be able to see when work such as a survey of a cemetery has taken place. This will ensure that findings from community-led research will inform future development.



The DEBS project runs for 18 months until February 2019. A workshop in York on 27 March brought stakeholders together, and a second workshop will be held towards the end of the project. Throughout this period, researchers from the University of York will work with six community groups to design and evaluate the usefulness of the resources created and to assess the potential for the new system to support work that groups (such as local archaeology and history societies, church history groups, and local photography clubs) are carrying out to improve understanding around burial spaces.

## NEARCH

At the end of May 2018, the five-year NEw scenarios for a community involved ARCHaeology (NEARCH) project came to a close ([nearch.eu](http://nearch.eu)). An EU Culture-funded initiative with 15 partners from nine countries, highlights included the series of surveys on public perceptions of archaeology within each of the archaeological partner countries (France, UK, Germany, Poland, Sweden, Netherlands, Spain and Italy), which have been synthesised into an easy to read and understand publication *Europeans and Archaeology: A survey on the European perception of archaeology and archaeological heritage* ([doi.org/10.5284/1043770](https://doi.org/10.5284/1043770)). After successfully expanding participation within the digital Day of Archaeology ([dayofarchaeology.com](http://dayofarchaeology.com)) in more NEARCH partner countries, all the posts created from 2011 to 2017 are being archived with the ADS, providing a snapshot of archaeological practice during this period for future researchers. Other significant outputs of the project are being made available from a dedicated NEARCH archive ([doi.org/10.5284/1041589](https://doi.org/10.5284/1041589)). ADS was also able to participate in several innovative and important initiatives, including leading one of 10 working groups within the NEARCHing Factory held in Santiago de Compostela, Spain in 2017. The NEARCHing Factory was an attempt to create a collective workspace for discussing the major problems in archaeology, and to test a variety of communication and presentation formats. The results of the NEARCHing Factory are now being used to re-examine traditional meeting, workshop and conference formats in archaeology to make them more dynamic and effective.

At the end of August 2017, NEARCH partners gathered in Maastricht in the Netherlands for the European Association of Archaeologists conference, which was preceded by the opening of the NEARCH exhibition *The Materiality of the Invisible*. This ambitious collaboration was organised by NEARCH partner the Jan van Eyck Academie, consisted of an exhibition over three locations across the city, and featured the works created by the NEARCH artists-in-

residence, including several superb works by Leyla Cárdenas. Leyla is from Bogotá, Colombia and was paired with ADS as her archaeological partner, in order to inform her creative process within the NEARCH project. Leyla came to York twice during the residence period, working and communicating with many archaeologists at ADS and the wider Department of Archaeology at York, even joining the first-year undergraduates during fieldwork.

## ArchAIDE

Archaeological Automatic Interpretation and Documentation of cEramics (ArchAIDE) is a Horizon 2020 project which aims to help archaeologists who may not have access to a pottery specialist identify their pottery ([archaide.eu](http://archaide.eu)). While not designed to replace the vital knowledge of the specialist community, ArchAIDE seeks to complement by speeding time consuming tasks, providing support for non-specialists, and helping students learn more about pottery recognition.

Highlights over the last year included a discussion workshop in York on 7 December 2017, hosted by ADS, the UK partner for ArchAIDE. The workshop was held mid-way through the three-year project and represented one of the two major points to invite feedback from the research community on the direction of the project, and the development of the ArchAIDE app. The workshop was fully subscribed and very successful, with representation from diverse perspectives, including academic archaeologists, contract archaeologists, representatives of national heritage agencies, and freelance pottery specialists. A full synthesis of the day can be found at: [www.archaide.eu/blogs](http://www.archaide.eu/blogs). In order to ensure feedback was also received from the commercial sector this was followed by a workshop at ClfA in Brighton on 26 April, 2018, which also represented the first opportunity to demonstrate the ArchAIDE app outside of the project. The app was very well received and attendees provided valuable feedback on its future development.

## E-RIHS

The three-year preparatory phase of the E-RIHS (European Research Infrastructure for Heritage Science) is now in its second year. The infrastructure is intended to build upon the work of a number of European heritage networks, namely EU-ARTECH, CHARISMA and IPERION CH in conservation science, and ARIADNE in archaeology. E-RIHS will provide an overarching Research Infrastructure with more than 60 partners from 18 EC Member States, including a large worldwide network of affiliations and collaborations including more than 20 prominent institutions. ADS continues to work on tasks in the Financial Planning and Access and Interoperability workpackages, which are aspects of planning for the DIGILAB initiative. DIGILAB is meant to provide online access to scientific data concerning tangible heritage, with special emphasis on making the data FAIR (Findable, Accessible, Interoperable, Re-usable), and is based on the successful implementation of ARIADNE. ADS participation in E-RIHS continues to provide access and a means for input within one of the most important large-scale EU infrastructure initiatives for archaeology. UK representation is led by the Institute for Sustainable Heritage at UCL, and ADS is also an active member of E-RIHS-UK, and Julian Richards is chair of the Infrastructure and Access Working group.

During 2017-18 we also submitted proposals for the next phase of ARIADNE, ARIADNEplus, and a COST action, SEADDA (Saving European Archaeology from a Digital Dark Age). We were also part of the SSHOC proposal (Social Sciences and Humanities Open Cloud), which brought together the major European research infrastructures within these domains.

## 10. Service management

### Business Process Review

At a Strategic Planning ADS Staff Away Day held in July 2017 various actions were agreed which have been taken forward during 2017-18. However, it was also agreed that ADS would benefit from a business process review undertaken by someone with an external and semi-independent perspective, and in October 2017 the ADS Management Committee confirmed this as a priority for the 2017-18 work plan. Subsequently, following discussions between the ADS Director and the University of York's Human Resources Department, it was agreed that the review would be undertaken by Jamie Halliday, the Faculty Operations Manager for Arts and Humanities, with support from Kate Slade, HR Advisor. The review took place during April-May 2018, and included interviews with a number of ADS employees, other university staff, and a small number of external stakeholders. Jamie Halliday's report was submitted in June 2018, and an Action Plan has been agreed. It includes some staffing restructuring which is being phased in during 2018-19, but also suggested two follow-up reviews: a Technical Systems Review carried out by Arthur Clune, the University's Assistant Director of Information Services and Head of IT Infrastructure, and a review of ADS charging policy undertaken by Michelle Squires, of the University's Management Accountants, during September 2018. The reviews were explicitly not designed as cost-saving exercises, or as reviews of individual staff performance. Since the last review of ADS, archiving activity and technical systems have grown considerably but, since the withdrawal of direct AHRC support, core archiving business has been subsidised by research activity. One of the underlying aims of the reviews, therefore, was to investigate measures to address this situation, and the recommendations will be taken forward from 2018-19 onwards.

### Systems Management

Our systems have been much more stable since our hacking incident in May 2017. This is largely due to the fact that we have migrated our web application servers away from Glassfish 2.1 to Glassfish 4.1. In addition, we have migrated many of our applications from Ubuntu 12.04 Virtual Machines (which are no longer supported) to Ubuntu 16.04 Virtual Machines.

The Ubuntu 16.04 VMs are now patched automatically by our IT Services department on Sundays. In the following year we will endeavour to migrate all of our Ubuntu 14.04 VMs to Ubuntu 16.04.

During the last 6 months, we have also begun to migrate our desktop PCs from Windows 7 to Windows 10 (as mandated by our IT Services department). We expect to complete the migration by December 2018.

Our only incident of note during the last year was a minor hacking incident in February 2018. Our PC security software warned use of a potential vulnerability in one of our web applications. After some investigation we ascertained that an old library jar file was allowing some javascript to be inserted into the application, which was then being used for BitCoin purposes. We updated the jar file and solved the problem.

On a staffing level, one of our two Developers left at the beginning of February 2018 and was replaced by an internal member of staff. We subsequently made the decision to train a further member of staff to handle basic systems tasks, such as starting and stopping web servers and applications.

Our current systems comprise:

|                                   |    |
|-----------------------------------|----|
| Windows 10 PCs                    | 7  |
| Windows 7 PCs                     | 9  |
| Ubuntu 16.04 Virtual Machines     | 16 |
| Ubuntu 14.04 Virtual Machines     | 14 |
| Oracle Databases                  | 2  |
| MySQL Databases                   | 1  |
| PostgreSQL Databases              | 1  |
| Networked File Storage Mounts     | 4  |
| Offsite Storage (UK Data Archive) | 1  |

### Financial Management and Staffing

During the year 1 August 2017 - 31 July 2018 the ADS and Internet Archaeology had total income of £698,342 and total expenditure of £728,428. After accounting adjustments (primarily related to exchange rate adjustments on the closure of the ARIADNE workorder) a deficit of £20,274 was carried forward from the 2016-17 financial year, giving a total deficit of £54,216. An additional £8,448 was received as the ADS share of University of York overheads and £30,000 was transferred from reserves to reduce the deficit to be carried forward to 2018-19 to £15,767 (the majority of which will be covered by delayed payments on two research projects). This has reduced the balance held in the ADS reserves account to £230,711. The full accounts for 2017-18 are available as a separate document.

The internal management team held quarterly meetings to review finances, and project leads met on a monthly basis to prioritise tasks and agree the work schedule for the coming month. There were also monthly meetings of all curatorial and technical staff to identify required systems and preservation actions, and quarterly meetings of all ADS staff. All staff had one-to-one meetings under the University of York's Performance Review scheme.

The departure of Lei Xia, in February 2018 led to a number of internal staffing changes, with Jo Gilham taking on the role of HERALD developer, and Tim Evans assuming sole responsibility for HERALD project management. The commencement of the DEBS project led to the fixed term part-time appointment of Nicole Beale as DEBS researcher. We were also fortunate to be able to employ Leontien Talboom, graduate of York's MSc Archaeological Information Systems programme as a Trainee Digital Archivist, prior to her taking up a funded PhD studentship.

## Appendices

### (A) STAFFING LIST

Julian Richards, Director  
Nicole Beale, Researcher, DEBS  
Tim Evans, Digital Archivist (Preservation Lead); HERALD Project Manager  
Jo Gilham, Digital Archivist; HERALD Developer (from February 2018)  
Katie Green, Communications & Access Manager  
Louisa Matthews, Collections Development Manager  
Ray Moore, Digital Archivist (ADS-easy Manager; Lead Archivist)  
Kieron Niven, Digital Archivist (Standards Editor)  
Jenny O'Brien, Digital Archivist (OASIS officer)  
Donna Page, Administrator  
Leontien Talboom, Trainee Digital Archivist  
Judith Winters, Internet Archaeology Editor  
Holly Wright, European Projects Manager  
Lei Xia, Applications Developer (until February 2018)  
Paul Young, Applications Developer

### (B) ADS MANAGEMENT COMMITTEE MEMBERSHIP

Met on 11 October 2017

Corresponding members are indicated with an asterisk

Sam Turner, Chair, University of Newcastle  
Mike Heyworth, MBE, Vice-Chair, Council for British Archaeology  
Jeremy Huggett, Vice-Chair, University of Glasgow  
William Kilbride, Vice-Chair, Digital Preservation Coalition

Alex Adamson, Historic Environment Scotland  
Ian Broadbridge, Arts and Humanities Research Council  
Nick Boldrini, ALGAO  
Barry Cunliffe\* British Academy  
Dan Pett\*, Fitzwilliam Museum  
Anthony Sinclair, Higher Education Academy  
Keith May, Historic England  
Mike Evans, Historic England  
Edmund Southworth\*, Manx National Heritage  
Clare Postlethwaite, MEDIN  
Mark Thorley, Natural Environment Research Council (outgoing)  
Amber Vater, Natural Environment Research Council (incoming)  
Gary Lock\* Oxford University  
David Thomas, RCAHMW  
Simon Gilmour/Catherine Aitken, Society of Antiquaries of Scotland  
Paul Miller, The Cloud of Data  
Andrew Bevan, UCL Institute of Archaeology  
Vince Gaffney\*, University of Birmingham  
Tim Darvill OBE, Bournemouth University  
Richard Higgins, University of Durham



Mark Gillings\*, University of Leicester  
 Graeme Earl, King's College London  
 Tim Sly, University of Southampton  
 Steve Mills\* University of Wales – Cardiff  
 Deborah Smith, PVC for Research, University of York

**(C) INTERNET ARCHAEOLOGY ADVISORY EDITORS**

|                          |   |
|--------------------------|---|
| Prof Mark Aldenderfer    | University of California, Merced              |
| Dr Graeme Earl           | University of Southampton                     |
| Dr Mike P Heyworth       | Council for British Archaeology (Co-director) |
| Dr Jeremy Huggett        | University of Glasgow                         |
| Dr Ian Johnson           | University of Sydney                          |
| Dr Sarah May             | Independent researcher                        |
| Dr Francis P McManamon   | Director, Digital Antiquity                   |
| Prof Franco Niccolucci   | University of Florence                        |
| Dr Alistair Paterson     | University of Western Australia               |
| Prof Julian D Richards   | University of York (Co-director)              |
| Mr Pete Rowsome          | Freelance consultant                          |
| Dr Seamus R Ross         | University of Toronto                         |
| Dr Claire Smith          | Flinders University                           |
| Ms Sarah Thompson        | Head of Content, University of York Library   |
| Prof Dr Frank Vermeulen  | University of Ghent                           |
| Dr Sarah Whitcher Kansa  | Alexandria Archive Institute                  |
| Dr Stephanie Wynne-Jones | University of York                            |

**(D) LIST OF COLLECTIONS RELEASED 1 August 2017 – 31 July 2018**

(OASIS Image archives excluded)

| Title   | ADS<br>-easy | Release<br>Date | Accession<br>Date | Funder              |
|---|--------------|-----------------|-------------------|---------------------|
| Palaeochannels of the Trent Catchment                                 | Yes          | 03/08/2017      | 12/06/2017        | Developer           |
| Oxfordshire Historic Landscape<br>Characterisation (HLC)              |              | 13/10/2017      | 24/07/2017        | Historic<br>England |
| Literacies and material culture: metal<br>inkwells in the Roman world | Yes          | 26/10/2017      | 31/10/2016        | Academic            |
| Hydrological assessment of Star Carr<br>catchment, Yorkshire          |              | 14/11/2017      | 25/02/2015        | Historic<br>England |
| Crystal Palace Iguanodon condition survey                             |              | 22/11/2017      | 10/07/2017        | Self                |



| Title  | ADS<br>-easy | Release<br>Date | Accession<br>Date | Funder                   |
|--|--------------|-----------------|-------------------|--------------------------|
| Cambridge Street, Birmingham. A Programme of Archaeological Investigations                                 |              | 23/11/2017      | 18/09/2017        | Historic England (BUFAU) |
| Banbury Town Centre Redevelopment Project. A Programme of Archaeological Investigations                    |              | 23/11/2017      | 19/09/2017        | Historic England (BUFAU) |
| Archaeological Excavation at St. Mary's Gate / Warser Gate, Nottingham                                     |              | 24/11/2017      | 05/10/2017        | Historic England (BUFAU) |
| Catesby Business Park, Balby Carr, Doncaster, South Yorkshire. Archaeological Excavation                   |              | 24/11/2017      | 19/09/2017        | Historic England (BUFAU) |
| Coughton Court, Warwickshire. A Programme of Archaeological Investigations                                 |              | 30/11/2017      | 15/09/2017        | Historic England (BUFAU) |
| Bluntington Farm House, Chaddesley Corbett, Worcestershire. Historic Building Recording and Interpretation |              | 07/12/2017      | 16/10/2017        | Historic England (BUFAU) |
| Excavations at Moat House, Chasewood Lodge, Exhall, Warwickshire 2005                                      |              | 07/12/2017      | 05/10/2017        | Historic England (BUFAU) |
| Beaudesert Hall, Beaudesert Park, Staffordshire. Historic Building Recording                               |              | 08/12/2017      | 18/10/2017        | Historic England (BUFAU) |
| Extensive Urban Survey - Cambridgeshire  | Yes          | 11/12/2017      | 28/09/2017        | Historic England         |
| Abberton to Wormingford Pipeline route: Colchester Borough. Archaeological Evaluation                      |              | 14/12/2017      | 08/12/2017        | Historic England (BUFAU) |
| Wivenhoe House, Wivenhoe Park, University of Essex, Colchester, Essex. Historic Building Recording         |              | 14/12/2017      | 27/11/2017        | Historic England (BUFAU) |

| Title  | ADS<br>-easy | Release<br>Date | Accession<br>Date | Funder                   |
|--|--------------|-----------------|-------------------|--------------------------|
| Westgate Area 1, Wakefield, West Yorkshire. Archaeological Excavation                                |              | 19/12/2017      | 24/11/2017        | Historic England (BUFAU) |
| 46-56 and 80 New Street, West Bromwich, West Midlands. Historic Building Recording                   |              | 19/12/2017      | 08/12/2017        | Historic England (BUFAU) |
| Midland Road, Peterborough. Archaeological Excavation  | Yes          | 21/12/2017      | 15/12/2017        | Developer                |
| Lithic scatters from the Tiverton area   | Yes          | 22/12/2017      | 17/03/2017        | Self funded              |
| Remembered Places, Forgotten Pasts The Don Drainage Basin in Prehistory                              | Yes          | 22/12/2017      | 03/08/2017        | Self funded              |
| Coalbournhill Glassworks, Amblecote, Dudley MBC. Archaeological Desk-Based Assessment and Evaluation |              | 08/01/2018      | 27/11/2017        | Historic England (BUFAU) |
| Wellhead Lane, Perry Barr, Birmingham: Archaeological Excavation                                     |              | 08/01/2018      | 24/11/2017        | Historic England (BUFAU) |
| Stour Basin Palaeolithic Project   | Yes          | 09/01/2018      | 11/12/2017        | Historic England         |
| Wixoe to Kirtling Green Pipeline. Archaeological Evaluation  |              | 10/01/2018      | 08/12/2017        | Historic England (BUFAU) |
| Tesco, Stourport-on-Severn. Archaeological Evaluation  |              | 10/01/2018      | 08/12/2017        | Historic England (BUFAU) |
| St Thomas Street / Chapman's Yard, Scarborough. A programme of Archaeological Investigations         |              | 15/01/2018      | 08/12/2017        | Historic England (BUFAU) |
| National Historic Seascape Characterisation Consolidation  | Yes          | 16/01/2018      | 11/12/2017        | Historic England         |

| Title  | ADS<br>-easy | Release<br>Date | Accession<br>Date | Funder                   |
|--|--------------|-----------------|-------------------|--------------------------|
| Connecting Derby. A Programme of Archaeological Investigations                                   |              | 17/01/2018      | 18/09/2017        | Historic England (BUFAU) |
| Fieldwalking at Stockings Farm, Arnold, Nottinghamshire  |              | 17/01/2018      | 05/10/2017        | Historic England (BUFAU) |
| Former Lace Works, Emerys Road, Gedling, Nottinghamshire. Archaeological Building Recording      |              | 17/01/2018      | 29/09/2017        | Historic England (BUFAU) |
| Shardlow Quarry, Derbyshire. A Programme of Archaeological Investigations                        |              | 18/01/2018      | 15/09/2017        | Historic England (BUFAU) |
| Shannon's Mill, Walsall. A Programme of Archaeological Investigations                            |              | 18/01/2018      | 18/09/2017        | Historic England (BUFAU) |
| Redhill Marina, Ratcliffe on Soar, Nottinghamshire. A Programme of Archaeological Investigations |              | 18/01/2018      | 11/09/2017        | Historic England (BUFAU) |
| Metchley Roman Forts. A Programme of Archaeological Investigations                               |              | 18/01/2018      | 18/09/2017        | Historic England (BUFAU) |
| Lune Mill, Lancaster. Historic Building Recording  |              | 18/01/2018      | 16/10/2017        | Historic England (BUFAU) |
| Littleton Arms and adjacent buildings, Walsall. Desk-based Assessment and Building Recording     |              | 18/01/2018      | 06/10/2017        | Historic England (BUFAU) |
| Little Paxton, Diddington, Cambridgeshire. Archaeological Evaluation 2004                        |              | 18/01/2018      | 29/09/2017        | Historic England (BUFAU) |
| Life, Work and Death in Birmingham, AD 1100-1900   |              | 18/01/2018      | 15/09/2017        | Historic England (BUFAU) |

| Title   | ADS<br>-easy | Release<br>Date | Accession<br>Date | Funder                   |
|---|--------------|-----------------|-------------------|--------------------------|
| The George Hotel, Load Street, Bewdley, Worcestershire. Historic Building Record and Watching Brief |              | 19/01/2018      | 16/10/2017        | Historic England (BUFAU) |
| South Stand, City Stadium, Filbert Street, Leicester. Historic Building Recording                   |              | 19/01/2018      | 28/09/2017        | Historic England (BUFAU) |
| The Parks, Godmanchester, Cambridgeshire. Archaeological Excavation 1998                            |              | 19/01/2018      | 19/09/2017        | Historic England (BUFAU) |
| Thorswood Nature Reserve, North Staffordshire. Archaeological Desk-Based Assessment and Survey      |              | 19/01/2018      | 28/09/2017        | Historic England (BUFAU) |
| Winterbrook, Wallingford, Oxfordshire. Fieldwalking 1998  |              | 19/01/2018      | 19/09/2017        | Historic England (BUFAU) |
| Windsor Street Gasworks, Birmingham. Archaeological Watching Briefs                                 |              | 19/01/2018      | 15/09/2017        | Historic England (BUFAU) |
| The Quadrant, Redditch, Worcestershire. Archaeological Excavation                                   |              | 19/01/2018      | 19/09/2017        | Historic England (BUFAU) |
| AS Rolling Mills, Cradely Heath, Sandwell, West Midlands. Historic Building Recording               |              | 19/01/2018      | 16/10/2017        | Historic England (BUFAU) |
| Land adjacent to 47 Parkside, Coventry. Archaeological Evaluation                                   |              | 22/01/2018      | 08/12/2017        | Historic England (BUFAU) |
| Hull College, Queen's Gardens, Hull. Archaeological Evaluation                                      |              | 22/01/2018      | 27/11/2017        | Historic England (BUFAU) |
| Heath Mill Lane, Birmingham. Archaeological Excavation  |              | 22/01/2018      | 14/11/2017        | Historic England (BUFAU) |

| Title  | ADS<br>-easy | Release<br>Date | Accession<br>Date | Funder                              |
|--|--------------|-----------------|-------------------|-------------------------------------|
| Land adjacent to All Saints Way, West Bromwich, Sandwell. Archaeological Evaluation    |              | 22/01/2018      | 08/12/2017        | Historic England (BUFAU)            |
| Proposed BCU Eastside Campus, Banbury Street, Birmingham. Archaeological Evaluation    |              | 22/01/2018      | 15/11/2017        | Historic England (BUFAU)            |
| Land at Spicers, Mill Lane, Sawston, Cambridgeshire. Archaeological Excavation         |              | 22/01/2018      | 27/11/2017        | Historic England (BUFAU)            |
| St John's Street, Coventry. A Programme of Archaeological Investigations               |              | 22/01/2018      | 14/11/2017        | Historic England (BUFAU)            |
| Stourbridge Sand Caverns, West Midlands. Archaeological Survey                         |              | 22/01/2018      | 27/11/2017        | Historic England (BUFAU)            |
| Tutbury Castle, Staffordshire. A Programme of Archaeological Work 2006                 |              | 22/01/2018      | 06/10/2017        | Historic England (BUFAU)            |
| A46 Newark to Widmerpool Road Improvement scheme (2009)                                |              | 25/01/2018      | 10/10/2017        | Developer                           |
| Late Iron Age Calleva: The Pre-Conquest Occupation at Silchester Insula IX             | Yes          | 12/02/2018      | 29/09/2017        | University of Reading               |
| Central Station North Quarter, Southampton (SOU1613). Archaeological Watching Brief    |              | 16/02/2018      | 19/12/2017        | Developer (via Southampton Museums) |
| Nantwich waterlogged deposits digital archive  |              | 16/02/2018      | 21/12/2017        | Historic England                    |
| Brunswick House, Brunswick Place, Southampton (SOU1667). Archaeological Watching Brief |              | 19/02/2018      | 19/12/2017        | Developer (via Southampton Museums) |

| Title   | ADS<br>-easy | Release<br>Date | Accession<br>Date | Funder                              |
|---|--------------|-----------------|-------------------|-------------------------------------|
| Eastpoint Centre, Bursledon Road, Southampton (SOU1652). Archaeological Evaluation                  |              | 19/02/2018      | 19/12/2017        | Developer (via Southampton Museums) |
| Oasis Academy, Romsey Road, Southampton (SOU1617). Archaeological Watching Brief                    |              | 19/02/2018      | 19/12/2017        | Developer (via Southampton Museums) |
| No. 9 New Street, Worcester. Archaeological Watching Brief (OASIS ID: borderar1-254986)             | Yes (oasis)  | 23/02/2018      | 12/02/2018        | Developer                           |
| Newnham, Bedford: A Romano-British Bath House and Estate Centre                                     |              | 09/03/2018      | 22/03/2017        | Historic England                    |
| The Social Context of Technology: non-ferrous metalworking in later prehistoric Britain and Ireland | Yes          | 12/03/2018      | 15/12/2017        | Leverhulme Trust                    |
| St Mary's Church of England Primary School, Southampton (SOU1631). Archaeological Watching Brief    |              | 13/03/2018      | 19/12/2017        | Developer (via Southampton Museums) |
| Southampton Northern Above Bar Arts Complex, Southampton (SOU1665). Archaeological Watching Brief   |              | 13/03/2018      | 19/12/2017        | Developer (via Southampton Museums) |
| Defended Small Towns of Roman Britain   |              | 16/03/2018      | 03/08/2017        | Paul Chadwick                       |
| Land at Freemantle Common Road, Southampton (SOU1697)   |              | 11/04/2018      | 19/12/2017        | Developer (via Southampton Museums) |
| A Review of Animal Bone Evidence from the Saxon to Post Medieval Periods in Southern Britain (6145) |              | 11/04/2018      | 28/07/2017        | Historic England                    |

| Title  | ADS<br>-easy | Release<br>Date | Accession<br>Date | Funder  |
|--|--------------|-----------------|-------------------|---|
| Star Carr and Lake Flixton archives  |              | 16/04/2018      | 08/02/2013        | European Research Council etc                       |
| Westclyst Community Primary School, Westclyst, Devon                                   | Yes          | 20/04/2018      | 08/12/2017        | Developer   |
| Glastonbury Abbey: Archaeology, Legend and Public Engagement                           |              | 30/04/2018      | 23/03/2018        | AHRC  |
| Pilgrimage and England's Cathedrals, past and present                                  |              | 30/04/2018      | 23/03/2018        | AHRC  |
| The Medieval Peasant House in Midland England: Data gathered in preparation of book    |              | 10/05/2018      | 19/01/2018        | Self funded   |
| A Roman Roadside Settlement at Healam Bridge: The Iron Age to Early Medieval Evidence  | Yes          | 16/05/2018      | 17/02/2017        | Developer   |
| Finzel's Reach, Bristol  |              | 18/05/2018      | 14/11/2017        | Developer   |
| Woodland Futures. Assessing Impacts of Forestry Strategies on the Historic Environment | Yes          | 18/05/2018      | 09/04/2018        | Historic England                                    |
| Denisova 11 Human Bone Fragment  |              | 28/06/2018      | 04/05/2018        | European Research Council                           |
| Historic Landscape Characterisation  |              | 28/06/2018      | 31/07/2013        | Historic England                                    |
| Taunton Castle, Somerset: Excavations and building studies, 2004-2013                  |              | 17/07/2018      | 04/05/2018        | Somerset Archaeol & Nat Hist Soc, SW Heritage Trust |



| Title  | ADS<br>-easy | Release<br>Date | Accession<br>Date | Funder    |
|--|--------------|-----------------|-------------------|-----------|
| Land adjacent to Newport Mobile Home Park, Exeter Road, Topsham, Exeter.<br>Archaeological Evaluation and Strip, Map and Sample Excavation | Yes          | 20/07/2018      | 06/06/2018        | Developer |

### Updates and new editions

A number of local and national journals have continued to be deposited and disseminated via ADS.

| New Journals or Monograph Series |   |   |               |                               |
|----------------------------------|---|---|---------------|-------------------------------|
| 1                                | The Forth Naturalist and Historian Journal              | Back run of journals 1976-2017  | May 2018      | Self-funded                   |
| 2                                | Chester Archaeological Society Journal                  | Back run of journals 1857-2016  | May 2018      | Self-funded                   |
| 3                                | Archaeology in the Severn Estuary                       | Back run of journals 1990-2014  | October 2018  | MEDIN, Cadw, Historic England |
| 4                                | Medieval Settlement Research Group Annual Reports       | The publications produced by the Medieval Settlement Research group were added in the period. | November 2017 | Self-funded                   |
| 5                                | Medieval Village Research Group Annual Reports          |   |               |                               |
| 6                                | Moated Sites Research Group Reports                     |   |               |                               |
| 7                                | Deserted Medieval Village Research Group Annual Reports |   |               |                               |

| Updates to existing Journals and Series  |  |                                       |              |             |
|--|--|---------------------------------------|--------------|-------------|
| 8  | Sussex Archaeological Collections  | 2015 volume released                  | Jan 2018     | Self-funded |
| 9  | Surrey Archaeological Collections  | 2015 volume released                  | July 2018    | Self-funded |
| 10                                       | Cumberland and Westmorland Antiquarian and Archaeological Society Transactions | 2007 volumes released                 | July 2018    | Self-funded |
| 11                                       | London Archaeologist   | 2016 volumes released                 | April 2018   | Self-funded |
| 12                                       | Cambridge Antiquarian Proceedings  | 2014 volume released                  | Aug 2017     | Self-funded |
| 13                                       | Proceedings of the Society of Antiquaries of Scotland (PSAS).                  | 2014 volume released                  | October 2017 | Self-funded |
| 14                                       | Scottish Archaeological Internet Reports                                       | Volumes 73-78 released (open access). | May 2018     | Self-funded |
| Updates to existing Archives or Datasets |  |                                       |              |             |
| 15                                       | VAG Cruck Database   | Data update                           | May 2018     | Self-funded |
| 16                                       | VAG Dendrochronology Database  | Data update                           | May 2018     | Self-funded |

## (E) CONFERENCES & PRESENTATIONS

| Date       | Personnel       | Event Type               | Title and Location.   |
|------------|-----------------|--------------------------|---|
| 01/09/2017 | HEW             | International Conference | <i>CRM-EH and STELLAR: An archaeological extension to CIDOC-CRM and tools for creating Linked Data.</i><br><b>EAA, Maastricht.</b>          |
| 7-8/9/2017 | JCW, RHM, KG    | CPD Workshop             | <i>Digital Data &amp; Archaeology,</i><br><b>Leicester.</b>   |
| 13/09/2017 | HEW             | EU Project Meeting       | <i>E-RIHS WP3 Financial Planning: Task 3.3 Financial aspects of data policy and management.</i><br><b>E-RIHS Interim Meeting, Prague.</b>   |
| 03/11/2017 | KG              | CPD Workshop             | <b>Carers Week, Sheffield.</b>  |
| 14/11/2017 | LM              | 2 Regional Workshops     | <b>Seeing the Light of Day. Digital Archives, Bristol (and Exeter).</b>   |
| 22/11/2017 | JDR             | EU Project Meeting       | <i>Interacting with Heritage: developing mobile technologies.</i><br><b>NEARCH meeting, Bologna.</b>  |
| 29/11/2017 | TE              | Regional Meeting         | <b>Scottish HER Forum.</b>  |
| 06/12/2017 | HEW, JDR, TE    | EU Project Meeting       | <i>WP10: Archiving and Dissemination.</i><br><b>ArchAIDE technical meeting, York</b>  |
| 07/12/2017 | TE, KG, JDR, TE | EU Project Workshop      | <i>Archaide.</i><br><b>ArchAIDE Workshop, York.</b>   |
| 05/02/2018 | KJN             | Webinar                  | <i>Preserving 3D data: Best Practices from a UK perspective.</i><br><b>CS3DP workshop, St.Louis, MO.</b>                                    |
| 08/02/2018 | KJN             | National Conference      | <i>3D Data: A few questions and a bit of a rant...,</i><br><b>Digital Past, Wales.</b>  |
| 22/02/2018 | HEW             | EU Project Meeting       | <i>E-RIHS WP3 Financial Planning: Task 3.3 Financial aspects of data policy and management.</i><br><b>E-RIHS Annual Meeting, Amsterdam.</b> |
| 28/03/2018 | KJN             | Workshop                 | An Update from the ADS, BIM & 3D group workshop,<br><b>Historic Environment Scotland Engine Shed, Stirling.</b>                             |

| Date       | Personnel | Event Type                        | Title and Location.  |
|------------|-----------|-----------------------------------|--|
| 25/04/2018 | KG        | CPD Workshop, National Conference | Selection and retention for archaeological archives.<br><b>CIfA Conference, Brighton.</b>  |
| 26/04/2018 | HEW, TE.  | CPD Workshop, National Conference | Intro to the ArchAIDE project.<br><b>CIfA Conference, Brighton.</b>  |
| 27/04/2018 | KG, TE    | Workshop, National Conference     | <i>Data management for archaeologists.</i><br><b>CIfA Conference, Brighton.</b>  |
| 09/05/2018 | JCW       | Regional Meeting                  | <i>Internet Archaeology: two decades of digital publication,</i><br><b>North East &amp; Yorkshire Regions Development Management Working Party, York.</b>              |
| 15/05/2018 | HEW       | EU Project Meeting                | <i>Five years of the NEARCH project,</i><br><b>NEARCH final meeting, Paris</b>   |
| 24/05/2018 | HEW, TE   | EU Project Meeting                | <i>WP10: Archiving and Dissemination,</i><br><b>ArchAIDE plenary meeting, Bonn.</b>  |
| 11/06/2018 | KG        | University Workshop               | <b>Research Data Management, York.</b>   |
| 21/06/2018 | JDR       | International Conference          | <i>Open Science and Open Data: Twenty years of Preserving the Bits at the Archaeology Data Service.</i><br><b>Open Science &amp; the Humanities, Barcelona.</b>        |
| 22/06/2018 | LM        | Meeting                           | <i>Built Legacy: Preserving the results of historic building investigations with the Archaeology Data Service.</i><br><b>CIfA BAG, Cressing Temple, nr Chelmsford.</b> |

## (F) PUBLICATIONS

Richards J.D. (2018) Archaeology Data Service (ADS). In: Smith C. (eds) *Encyclopedia of Global Archaeology*. Springer, Cham