



Saving European Archaeology from the Digital Dark Age

National Workshop - Serbia, Viminacium, 19 April 2022

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ARCHAEOLOGY
DATA SERVICE

UNIVERSITY *of York*



COST Action SEADDA (CA18128)
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Framework Programme of the
European Union.



The Archaeology Data Service

- Set up in 1996
- Based at the University of York



Mission

Supporting research, learning and teaching with free, high quality and dependable digital resources

- Preserve data
- Free online access to data
- Guidance and support for data creators
- Research

<http://guides.archaeologydataservice.ac.uk>

Lessons from ARIADNE

- EU FP7 project under the 'Infrastructures' theme, including 23 European partners across 16 countries
- Four-year project: ended January 2017
- 17 Workpackages – primary deliverable: collection level metadata aggregation portal
- Coordinator: PIN Scri - Polo Universitario "Città di Prato" at the University of Florence
- Deputy Coordinator: ADS



ARIADNE

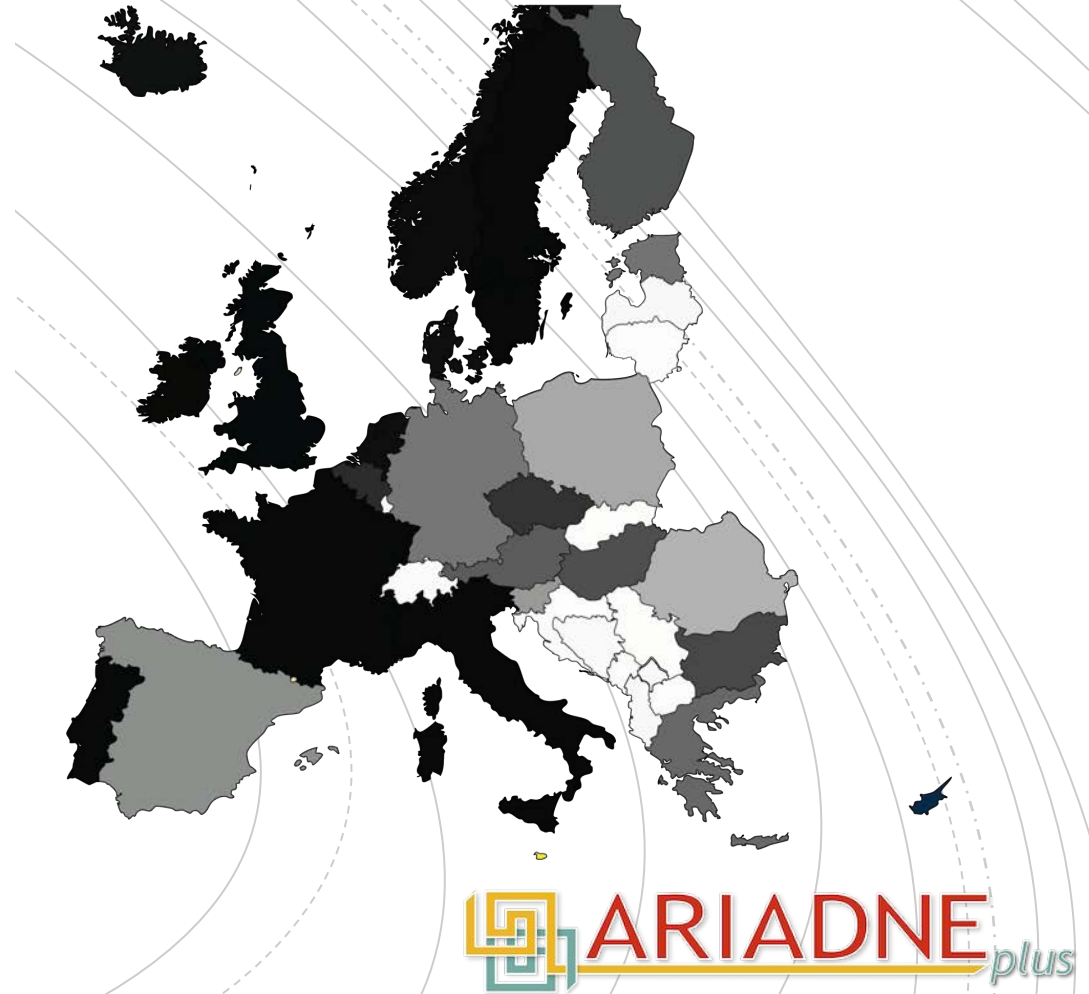
- 9 ICT organisations
- 14 archaeological organisations
- 15 Associate partners
- External community building
 - Transnational access
 - Training events
 - Special interest groups



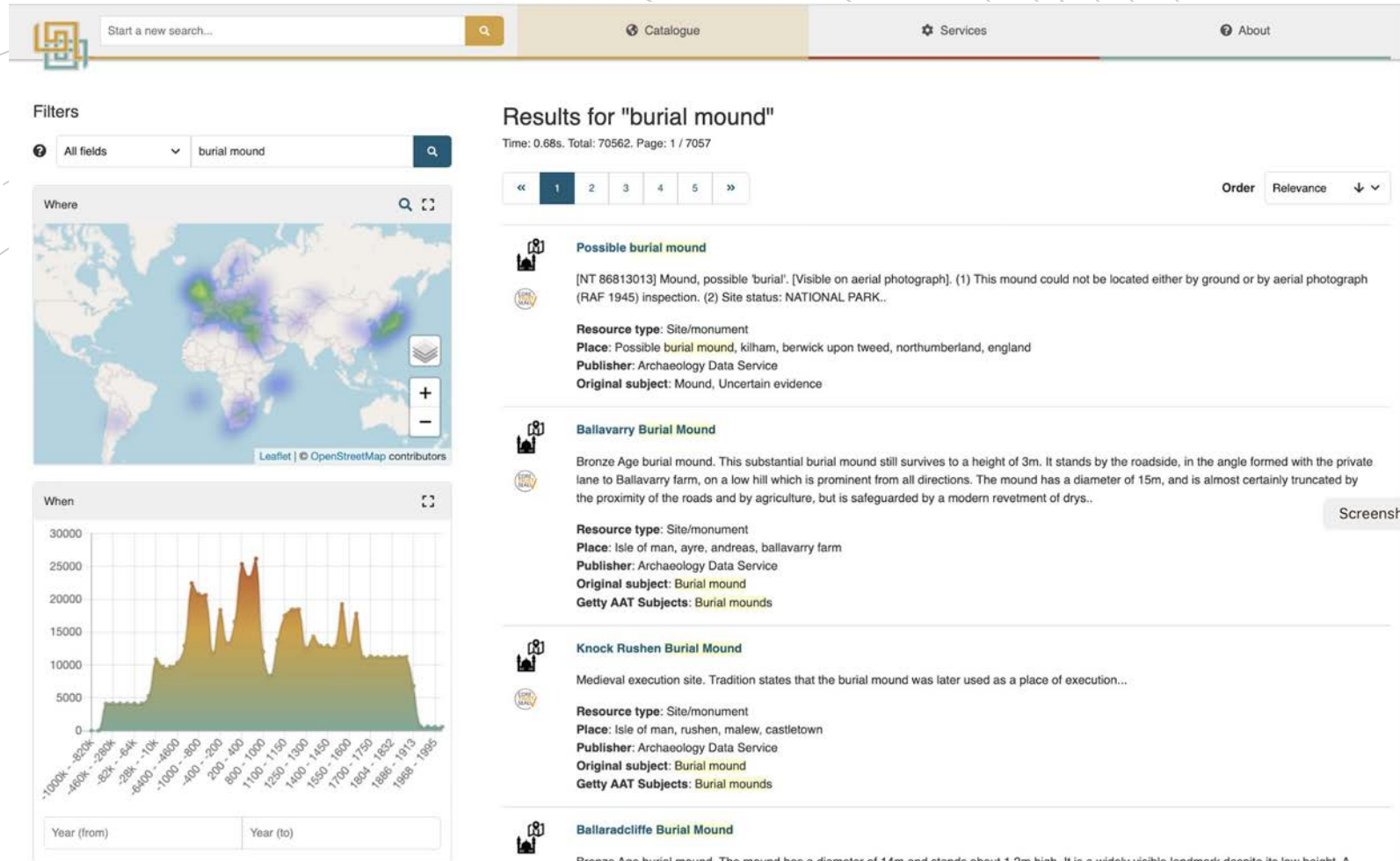
ARIADNEplus

- 41 partners
- 28 countries
- Majority are archaeological partners
- Extending thematic coverage
- Expanding participation

<https://ariadne-infrastructure.eu/>



Why SEADDA?



The screenshot displays the SEADDA web application interface. At the top, there is a search bar with the placeholder text "Start a new search..." and a magnifying glass icon. To the right of the search bar are navigation links: "Catalogue", "Services", and "About".

Below the search bar, the "Filters" section is visible. It includes a dropdown menu set to "All fields" and a search box containing the text "burial mound". To the right of the search box is a magnifying glass icon.

On the left side of the results area, there are two interactive elements:

- Where:** A world map showing a heatmap of search results, with higher concentrations in Europe and North America. It includes a search icon, a full-screen icon, and zoom controls (+, -, and a reset button).
- When:** A bar chart showing the distribution of results over time. The x-axis represents years from -10000 to 1995, and the y-axis represents the count of results from 0 to 30000. The chart shows several peaks, with the highest around 1000-1500 AD.

The main results area is titled "Results for 'burial mound'" and shows a pagination bar with page numbers 1 through 5, and a "Relevance" sort order dropdown. The results list includes:

- Possible burial mound:** [NT 86813013] Mound, possible 'burial'. [Visible on aerial photograph]. (1) This mound could not be located either by ground or by aerial photograph (RAF 1945) inspection. (2) Site status: NATIONAL PARK..
 - Resource type:** Site/monument
 - Place:** Possible burial mound, kilham, berwick upon tweed, northumberland, england
 - Publisher:** Archaeology Data Service
 - Original subject:** Mound, Uncertain evidence
- Ballavarry Burial Mound:** Bronze Age burial mound. This substantial burial mound still survives to a height of 3m. It stands by the roadside, in the angle formed with the private lane to Ballavarry farm, on a low hill which is prominent from all directions. The mound has a diameter of 15m, and is almost certainly truncated by the proximity of the roads and by agriculture, but is safeguarded by a modern revetment of dries..
 - Resource type:** Site/monument
 - Place:** Isle of man, ayre, andreas, ballavarry farm
 - Publisher:** Archaeology Data Service
 - Original subject:** Burial mound
 - Getty AAT Subjects:** Burial mounds
- Knock Rushen Burial Mound:** Medieval execution site. Tradition states that the burial mound was later used as a place of execution...
 - Resource type:** Site/monument
 - Place:** Isle of man, rushen, malew, castletown
 - Publisher:** Archaeology Data Service
 - Original subject:** Burial mound
 - Getty AAT Subjects:** Burial mounds
- Ballaradcliffe Burial Mound:** Bronze Age burial mound. The mound has a diameter of 14m and stands about 1.2m high. It is a widely visible landmark despite its low height. &
 - Resource type:** Site/monument
 - Place:** Isle of man, rushen, malew, castletown
 - Publisher:** Archaeology Data Service
 - Original subject:** Burial mound
 - Getty AAT Subjects:** Burial mounds

Internal Capacity Building

- Paper was given in 2015 by partners in Slovenia and Ireland talking about “have’s and have nots” when it comes to having an acceptable place for their archaeological data in the long term
- Plans were made to offer data management workshops to partners in their own countries - Austria and Slovenia both accepted

Data management workshops

Local ARIADNE partners worked hard to make sure governmental and institutional stakeholders attended, and took on understanding and presenting the state of play in their country



Data management workshops

Level of interest was much higher than expected:

- Pressure from funders to deposit data into an open repository
- Pressure from institutions to deposit data into an open repository
- Funding available; but no guidance
- No appropriate options for archaeological data
- Conversations continued about how to take expertise within ARIADNE and collaborate beyond current network
- Working together was going to be critical to moving forward

Challenges for Archaeology

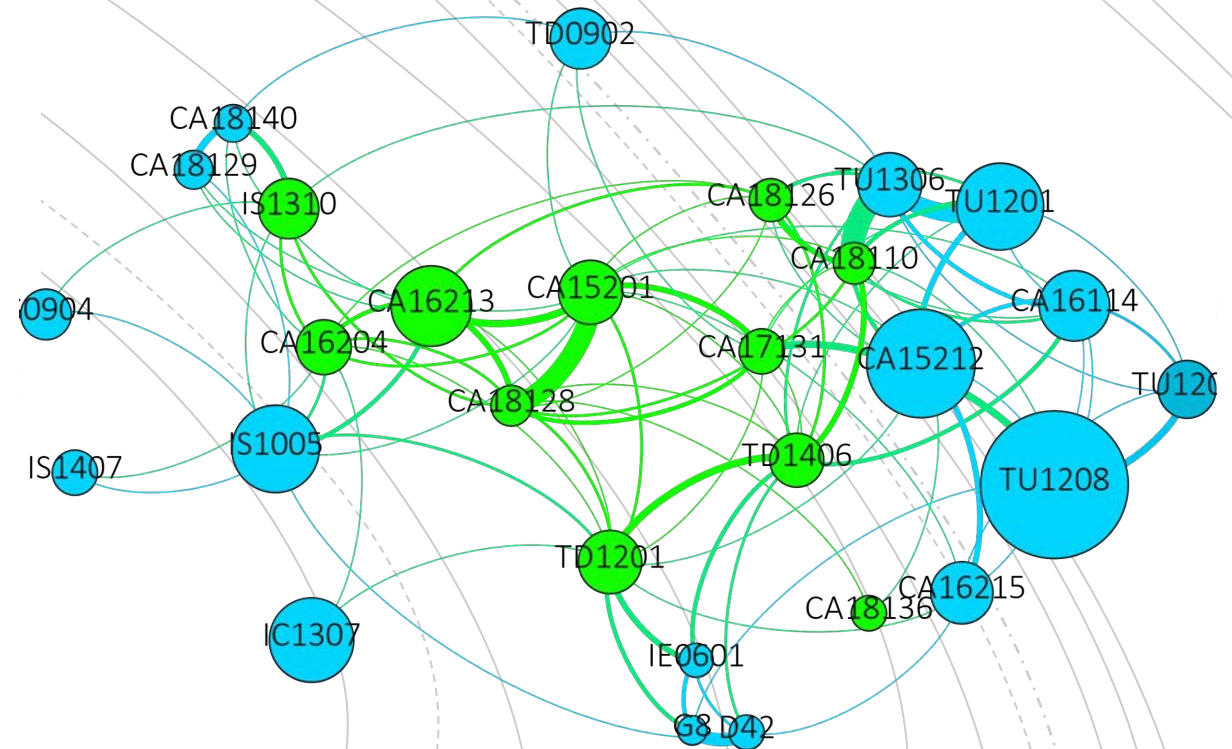
- Archaeological data often derived from non-repeatable interventions
- Digital data more fragile and subject to obsolescence
- Risk losing a generation of research – Urgency!



COST Action SEADDA : ***Saving European Archaeology*** ***from the Digital Dark Age***

Funding (four years) for networking:
meetings, training sessions, scientific
missions, open access publications

- Members representing 34 countries
- Meant to complement
*Archaeological practices and
knowledge work in the digital
environment (ARKWORK)*



- Coordinate information collection to understand the current state-of-the-art regarding the preservation, dissemination and re-use of archaeological data.
- Develop a common understanding of international best practice for preservation, dissemination and re-use of archaeological data
- Foster knowledge exchange around international best practice for preservation, dissemination and re-use of archaeological data

Stewardship of archaeological data

Objective: To bring together members with varying levels of experience to share their successes and challenges around the stewardship of archaeological data to create a sub-network.

Practical and ethical considerations will be explored:

- Encouragements and resistances to sharing data and making it openly accessible within archaeology
- Who should be responsible in short and long-term for preservation

The starting point for those who wish to begin or progress dialogue in their region or country.

National workshops!

Planning for Archiving

Objective: To identify the practical and technical issues surrounding the creation of an appropriate repository for archaeological data

- Understanding hardware and software options
- Management structures
- Training of archivists

The WG identifies existing best practice, changing future needs, and pragmatic technical and structural solutions.

Preservation and Dissemination Best Practice

Objective: Understand current international best practice for archiving and dissemination, and implementation by existing repositories.

- Open Archival Information System (OAIS) model
- The FAIR Principles
- Repository accreditation
- Cost modelling
- Dealing with data types

Will bring together archaeological digital archivists to share current practice, and survey future trends to understand the changing archaeological and digital landscapes (domain and technology watch).

Use and Re-Use of Archaeological Data

Objective: To understand how to optimise archives and interfaces to maximise the use and re-use of archaeological data. To explore how archaeological archives can better respond to user needs, and ways to document and understand both quantitative and qualitative re-use.

- Explore barriers to re-use, such as IPR and licencing
- Explore design of underlying data structures and their interfaces

Will focus on initiatives like the FAIR Principles and technologies that improve and optimise searching, issues around how data is created, organised and disseminated, different options for interface design, and developing best practice around qualitative re-use.

Open Access Publications

- Internet Archaeology SEADDA themed issue *Digital Archiving in Archaeology: The state of the art*
- 28 papers representing the current state of archiving in 28 nations and states.
- Also just published: *Data Management Policies and Practices of Digital Archaeological Repositories*

Digital Archiving in Archaeology: The State of the Art. Introduction

Julian D. Richards, Ulf Jakobsson, David Novák, Benjamin Štular and Holly Wright

Cite this as: Richards, J.D., Jakobsson, U., Novák, D., Štular, B. and Wright, H. 2021 Digital Archiving in Archaeology: The State of the Art. Introduction, *Internet Archaeology* 58. <https://doi.org/10.11141/ia.58.23>



The advent of ubiquitous computing has created a golden age for archaeological researchers and participating publics, but the price is a digital resource that is now in jeopardy. The archaeological record, in digital form, is at risk not simply from obsolescence and media failure, but the domain is also vulnerable to cyberattacks in Open Data. Without swift and informed

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<https://intarch.ac.uk/journal/issue59/2/index.html>



<https://www.seadda.eu/>

Thank You!!

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Archaeology Data Service

<http://archaeologydataservice.ac.uk>

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<http://seadda.eu>



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