

What's in Store?

Towards a Welsh Strategy for the Management of, and Access to, Archaeological Collections

Report for:

National Museums & Galleries of Wales

The Council of Museums in Wales

The Royal Commission on the Ancient and Historical Monuments of Wales

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Foreword

In 1997 a survey of archaeological archives was undertaken in England for English Heritage and the former Museums & Galleries Commission. The resulting report by Hedley Swain was published in 1998. Archaeological archives comprise the physical record and the collected remains resulting from archaeological activity, normally excavation. The report highlighted the difficulty many museums were having properly curating archaeological archives; the lack of good guidance and standards in the creation of archaeological archives and their successful transfer to museums; and the limited use archaeological archives were being put to once in museums. It was recommended that a similar survey be undertaken in Wales.

Since then English Heritage has produced a further report by Kathy Perrin 'Archaeological Archives: Documentation, Access and Deposition' (2002). In Spring 2002 the Archaeological Archives Forum was created. This body includes representatives of the main archaeological and museum bodies in Britain, and will work to implement the recommendations of both reports.

In response to these initiatives The Council of Museums in Wales with the National Museums & Galleries of Wales (NMGW) and the Royal Commission on the Ancient and Historical Monument of Wales (RCAHMW) commissioned Cardiff based consultants Jane Henderson and Phil Parkes to undertake a similar survey in Wales. Although organisational structures may be different in Wales the problems of curating and providing access to archaeological archives are broadly the same. The opportunity was also taken to address additional issues relevant to those working in Wales. The excellent response to the questionnaire (71%) has provided valuable information to develop a future strategy.

Recent changes within the Welsh Assembly Government – the portfolio of Culture Minister now includes Cadw, and the formation of CyMAL (Museums, Libraries & Archives Wales) – make this report and its recommendations of particular value and significance.

It is intended that the report will stimulate further discussion amongst the archaeological and heritage community in Wales. Following further consultation, and any amendment, the report will be forwarded to the Welsh Assembly Government for consideration and action.

I would like to thank the members of the steering group who have taken this work forward – Richard Brewer and Elizabeth Walker (NMGW), Hilary Malaws (RCAHMW) and Charles Hill (Glamorgan Gwent Archaeological Trust representing the four Welsh Archaeological Trusts). Our thanks are due to Jane and Phil for their hard work and stimulating discussion. The final recommendations and content of the report however remain the responsibility of the steering group.

John Marjoram
Acting Director
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1 Introduction

Three of the leading heritage agencies in Wales formed a partnership to commission an investigation into the needs of archaeological collections. These span some 230,000 years from the first known arrival of early humans in Wales to the beginning of the Industrial Revolution. The project was intended to gather evidence to inform policy makers to help plan the future needs for archaeological storage and to promote the value of the archaeological record.

Archaeological archives are physical evidence of our shared past. They comprise archaeological objects and specimens, and the accompanying paper, photographic and digital records. They play a considerable role in increasing knowledge and appreciation of Welsh cultural heritage from local communities to a national and international audience. It is therefore vital that these collections are cared for, to ensure their long term preservation to make them accessible to those who have an interest in learning about Wales' past.

This report follows a Wales wide survey and consultation process. The report contains an assessment of the current status of the collections, an investigation into the future levels of growth and an analysis of the threats and opportunities associated with these collections. Based on the evidence collected the report concludes with a series of nine recommendations. We believe the actions recommended are in line with the Welsh Assembly Government's priorities and could maximise the potential public benefit, ensure sustainable access to our shared past and deliver successful partnerships between educational establishments, business and public sector organisations.

The report is available for discussion and the partnership is actively seeking comments from the sector. It is hoped that at the end of this process the stakeholders can agree a common strategy and a method of delivery. The successful implementation of the recommendations would require the co-operation of many partners and if adopted the partnership should develop indicators to measure and monitor the delivery of the strategy.

1.1 Recommendations of the Report

Recommendation 1a	Create a national store, or
Recommendation 1b	Create regional stores as centres of excellence
Recommendation 2	Create a database of Welsh archaeological collections
Recommendation 3	Establish a national panel for archaeology
Recommendation 4	CyMAL to develop a remit for archaeology
Recommendation 5	Encourage and develop a nationally framed collecting policy through the Museum Registration Scheme
Recommendation 6	Draw up guidelines for the deposition of collections
Recommendation 7	Review the management of the information base
Recommendation 8	Require the management of archaeological archives by universities
Recommendation 9	Additional training

2 Project Method

2.1 Project Inception

The National Museums & Galleries of Wales (NMGW), The Council of Museums in Wales (CMW) and Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) created this initiative to examine the body of evidence retrieved from archaeological investigations, which is crucial to our understanding of the past.

The partnership appointed Cardiff based consultants Jane Henderson and Phil Parkes to investigate the location and quantity of Welsh archaeological archives, the use made of the evidence from archaeological sites, the accessibility of information to the people in Wales and beyond, the collecting policies of the collecting bodies and the provision of archaeological expertise across Wales.

2.2 Steering Group

The partnership formed a steering group to oversee the research and to consult on the findings and investigate means to implement agreed recommendations.

The steering group was composed as follows:

Richard Brewer	National Museums & Galleries of Wales (NMGW)
Charles Hill	Glamorgan Gwent Archaeological Trust (GGAT), representing Welsh Regional Archaeological Trusts
Hilary Malaws	Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW)
John Marjoram	Council of Museums in Wales (CMW)
Elizabeth Walker	National Museums & Galleries of Wales (NMGW)

Consultants to the Steering Group

Jane Henderson	Collections Care Consultancy / Cardiff University
Phil Parkes	Cardiff University

2.3 Consultation Meetings

A series of consultation discussions were held with stakeholders in Wales and across the UK to establish a national perspective and professional views on the issues raised. A full list of those consulted is included as Appendix B. Specific opinions and views have been integrated into the report. The project team is grateful to consultees for their time and suggestions, many of which have found a place amongst the

recommendations. During research it was evident that there was a consensus within the sector around several broad themes. We believe these should inform any further evaluation and consultation on the report and the selection and adoption of the strategy and recommendations.

Consensus from consultation:

- Working in partnership has been a strength for this community in Wales and all recommendations should consider cooperation, exploiting synergies and exchanging skills, rather than enforcement as a first approach.
- It is essential to make policies work together to maximise their effectiveness.
- Local solutions must be acceptable to local communities and must develop capacity beyond urban SE Wales.
- Solutions should reflect the unique nature of Wales where necessary, but should accord with broader UK wide initiatives wherever applicable.
- Archaeological archives are a significant learning resource for the whole community, from school student to academics.

2.4 Research

The consultants have many years of experience working with Welsh archaeological archives and have reviewed many core documents for the sector. This process has informed the report. A full list of documents consulted is contained in Appendix E. This process highlighted the existence of a series of documents created over the last 20 years that provide advice and make recommendations for the preparation and deposition of archaeological archives. The researchers note that many core publications focus on access only at the end of the research programme and have not emphasised access throughout the life of collections from excavation to deposition.

In addition to existing published material there are several current initiatives which will have a material impact on this area of work. One is the creation of the Archaeological Archives Forum, which hopes to: create new standards of access and deposition; investigate the provision of archaeological resource centres; research digital access and archiving and develop training in post excavation archiving. Also of great current significance are the guidelines recently drawn up by the Museum of London for the deposition of archaeological archives in the Archaeological Archive and Research Centre (LAARC) in Mortimer Wheeler House. This sizeable document acts as a benchmark in best practice for the deposition of archaeological archives in museums.

One aspect of the project was to consider which of the existing published standards was having a positive impact on the sector and where further guidelines are needed, if at all.

2.5 Questionnaire

The questionnaire was distributed to 133 organisations. 95 replied giving a response rate of 71%. Broken down this relates to 80% of museums and 67% of excavating units and individuals. Of those 78 held archaeological archives and this figure forms the baseline for the analysis of the results.

The response rate for the questionnaire of 71% is considered by the consultants to be excellent and a strong indicator of the importance that members of the sector ascribe to the sustainability of archaeological archives.

2.6 Definitions

A full list of all the definitions used in the research is included as Appendix A.

2.6.1 Archaeological Archives

There exists significant confusion of the use of the term ‘archaeological archive’. This term is used widely amongst archaeologists to describe all of the material generated by the archaeological process including small finds and environmental samples as well as the supporting written and digital records. This formulation has been in use in the archaeological community for some time and to avoid any confusion the definition below was provided with the questionnaire and has been included with all relevant documents.

Archaeological archive:

All material from archaeological excavations, evaluations, site assessments and formal field walking projects from Wales.

This includes all artefacts, human remains, environmental evidence e.g. bones, soil samples, paper records e.g. plans, notes and record sheets, photographic materials, digital records and any post excavation records in any format e.g. specialist reports, conservation reports, archive reports and publications.

This specifically excludes:

Non Welsh material such as ethnographic collections or Egyptology, single finds e.g. portable antiquities, non portable archaeology such as monuments, historic buildings, crosses, standing stones or sites and industrial collections

This research specifically excludes archives from archaeological programmes such as site evaluations where no finds were generated. This type of documentary, digital or

photographic archive is covered by the recommendations laid down in BS 5454 'Storage and Exhibition of Archival Documents'. BS 5454 defines an archive as:

'Documents preserved permanently by the persons responsible for the transactions of which such documents are the records, or by their successors or appointees, in their own custody, and normally in the arrangement in which the documents were created.'

For the purpose of this report the terms 'archaeological archive' and 'archive' are used with two distinct meanings. Whilst this is acceptable in circulation amongst the archaeological community the researchers recommend that any summary reports which will have a wider circulation avoid the term archaeological archives where this may cause confusion.

2.6.2 Large Collections

Another definition introduced in the analysis of the results was of 'large' collections. This designates a collection that occupies ten metres of shelving or more. This is helpful to investigate how resources are allocated for the more significant sized collections and has been used when looking at issues such as the availability of specialists in an organisation. It would not be reasonable to expect an organisation with three finds or two boxes of archaeology to have access to an archaeologist, nor is that collection likely to feature in their priorities. It is unreasonable to base any conclusions on the absence of such provisions. Where a chart is based on a larger collection, this is indicated. Larger collections account for 99.6% of all material in permanent collections and 90.5% of all material in temporary collections.

2.6.3 Grey Literature

This report uses the Council for British Archaeology (CBA) definition of grey literature, that is: *'any work which is not issued for public sale/widespread distribution and does not have an ISBN/ISSN, as is often the case, for instance, with reports derived from small-scale developer-funded projects.'*

2.6.4 Temporary and Permanent Collections

Permanent collections: Archaeological archives kept in an organisation with a commitment to keep the collection on a permanent basis.

Temporary collections: Archaeological archives kept for reasons such as study research or conservation which are not intended to become a permanent part of the institutions collections.

3 The National Perspective

3.1 UK National

Archaeology has been built into the planning process in the UK with a range of planning policy guidelines for England, Wales, Scotland and Northern Ireland, which are generally analogous but have certain specific differences.

In England archaeological units are required to work to MAP2 (1991), which provides a model for the management of archaeological projects based on Planning Policy Guidelines (PPG) 16. The equivalent of PPG 16 in Wales is Welsh Office Circular 60/96. MAP2 breaks archaeological projects into five phases, of which the final is the publication of the report and transfer of the project archive. MAP2 (section 4.10) notes that:

'The site archive is a primary resource and must be properly curated and stored so that it can be consulted in the future.'

'Long term storage is a museum responsibility, and it is essential that contact with a museum professional is made at a sufficiently early stage. Museum requirements must be established and appropriate resources allocated.'

Despite the widespread use of MAP2, it is reported that there are problems arising from the implementation of the guidance and the lack of standards for transfer after post-excavation work. PPG 16 does not refer to the long-term deposition of the archaeological archive in a museum, even though this is the means by which 'preservation by record' is enabled. English Heritage has made deposition of the archaeological archive a stage payment for English Heritage funded excavations. For developer-funded work the amount of competition for each project is seen as driving down quality of work and the range of sources of funding means that often no strict guidelines can be imposed.

The First Report of the All Party Parliamentary Archaeological Group (APPAG) (Jan 2003) has drawn together submissions about the current state of archaeology in the UK and has identified a range of recommendations. These include regional stores (nine for England, one each for Wales, Scotland and Northern Ireland), revision of the current PPG16 to consider the problem of long term archiving of the excavation results and a revision of the competitive tendering process.

3.1.1 Specific National Differences

England / Wales

Deposition – archaeologists approach the museum directly on behalf of the developer. Supporting documentary, digital and photographic archives can be transferred to the relevant National Monuments Record as necessary.

Ownership – finds belong to the landowner other than in cases of treasure and wreck. Landowners can be difficult to identify for some areas of land, such as beaches, or where there has been a significant length of time between excavation and deposition.

Scotland

Deposition – under the laws of *bona vacantia* and Treasure Trove all objects whose original owner or rightful heir cannot be identified are the property of the Crown. The Queen's and Lord Treasurer Remembrancer (Q<R) has sole responsibility for deciding on the allocation of Crown-claimed material. Objects claimed as Treasure Trove are allocated to museums via The Treasure Trove Advisory Panel (TTAP) or, in the case of material excavated through Government-sponsored work, Historic Scotland (advised by its Finds Disposal Panel). The National Monuments Record of Scotland (NMRS) is the recognised repository for all archives from excavations.

Ownership – as above, the finds archive is owned by the Crown under the laws of *bona vacantia* and Treasure Trove and is usually transferred to the recipient museum when an excavation report has been submitted for publication. The supporting documentary, digital and photographic archives are therefore held separately from the finds archive.

Northern Ireland

Deposition – The Department of the Environment, Northern Ireland (DoENI) is automatically informed of projects through its administration of the excavation licensing system. The appropriate repository is identified at the post-excavation stage and should liaise with the excavator once the decision is made.

The deposition of summary and full reports is a legal requirement, under the NI licensing excavation system.

3.2 UK Archaeological Groups and Initiatives

The following organisations operate in the UK and their activities and publications are referred to in this report. The following brief summaries are provided to identify these bodies and highlight their areas of concern.

3.2.1 The Archaeological Archives Forum (AAF)

The Archaeological Archives Forum aims to link together in partnership all major parties with an interest in archaeological archives in order that common policies and practice can be developed and applied and to identify the courses of action necessary to further best practice in the field of archaeological archives and to effect the means to achieve this action.

3.2.2 Archaeology Data Service (ADS)

The aim of the Archaeology Data Service (ADS) is to collect, describe, catalogue, preserve and provide user support for digital resources that are created as a product of archaeological research. The ADS also has a responsibility for promoting standards and guidelines for best practice in the creation, description, preservation and use of spatial information across the Arts and Humanities Data Service as a whole. The ADS collaborates with national and local agencies to promote greater use of existing services.

3.2.3 The Archives Task Force (ATF)

Resource established the Archives Task Force in response to a request by the Department for Culture, Media and Sport (DCMS) to carry out an in-depth analysis and review of the state of the UK's unique and diverse archives. The Task Force will undertake a detailed investigation and analysis of the state of the UK's archives. The ATF have identified the need for a strategy for national knowledge management: for saving and storing our present for future generations. The ATF is due to report to government and funding agencies in the summer of 2003. Interim reports and minutes of the group are available through Resource's web site.

3.2.4 The Institute of Field Archaeologists (IFA)

The Institute of Field Archaeologists (IFA) is the professional organisation for archaeologists in the United Kingdom. It promotes professional standards and ethics for conserving, managing, understanding and promoting enjoyment of the heritage.

3.2.5 The Portable Antiquities Scheme

The Portable Antiquities Scheme is a voluntary recording scheme for the reporting of archaeological objects found by members of the public. Every year many thousands of objects are discovered, many of these by metal detector users, but also by people whilst out walking, gardening or going about their daily work. Such discoveries offer an important source for understanding our past.

3.2.6 The Society of Museum Archaeologists (SMA)

The Society of Museum Archaeologists (SMA) exists to promote museum involvement in all aspects of archaeology and emphasise the unique contribution of museums to the essential unity of the archaeological profession. They aim to increase public understanding of the archaeological past, and a fuller public appreciation of the importance of archaeology. The SMA campaigns for the acceptance of museums as guardians of a vital part of the nation's heritage and as the appropriate location for the storage and interpretation of all archaeological material. They also work to develop a coherent philosophy of the role of archaeologists in museums.

3.3 Wales

Every year numerous archaeological investigations are undertaken across Wales. The majority of this work results from the requirements of the planning process, whilst some is also instigated by research needs, designed to enhance our understanding of life in the past. Advice on archaeology within the planning system is provided by Welsh Office *Circular 60/96, Planning and the Historic Environment: Archaeology*, that supplements the policies in *Planning Policy Wales (2002)*.

3.3.1 Welsh Archaeological Trusts (WAT)

The Welsh Archaeological Trusts provide specialist advice to local planning authorities assessing the potential impact of development on the heritage of an area. This advice allows the planning authority to recommend a range of options from field evaluation prior to the determination of a planning application through to full excavation or a watching brief as conditioned by the local planning authority. In many cases planning applications are passed as there is no significant impact on the heritage.

The curatorial staff of a Trust provide a brief for the work to be carried out and are responsible for approving the specifications for this work, as well as monitoring the work from initiation through to deposition of the archaeological archive to ensure that an archaeological brief is adequately fulfilled at all stages, irrespective of the contractual arrangements. The Trust can seek amendments to, or if necessary reject, any contracted piece of work that they consider does not fulfil the archaeological brief (WAT *Curators Code of Practice*).

Funding for this curatorial role of the Trusts is provided by Cadw and the Unitary Authorities. Cadw encourages the Trusts to make provisions for the satisfactory deposition of the archaeological archives.

3.3.2 Sites and Monuments Record (SMR)

Each regional Trust manages the regional Sites and Monuments Record, a database of information about sites of archaeological and historical interest. Maintenance of the SMRs is partly supported by distinct and targeted funding from RCAHMW and Cadw for a range of identified tasks. Part of the SMR consists of a computerised database of sites. For each site, key information is recorded, such as its name, location, site type, period and legal status. A brief description of the remains is also entered. Other information is recorded in the GIS, such as the boundaries of Scheduled Ancient Monuments and extents and details of excavations and surveys. Alongside the computerised SMR the trusts hold substantial quantities of paper records, maps, photographs and other supporting information.

The national and regional records (NMRW and SMRs) are sources of data for anyone interested in archaeology and history. They are available for research and analysis by both specialists and the general public and play a very important role in assisting with the management and presentation of the historic landscape.

3.3.3 The Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) and the National Monuments Record of Wales (NMRW)

RCAHMW is an Assembly Sponsored Public Body with national responsibility for surveying, recording, publishing and maintaining a database of ancient, historical and maritime sites, structures and landscapes in Wales.

RCAHMW aims to collect and curate archaeological records (paper and digital) within the terms of the *National Monuments Record of Wales (NMRW) Collecting Policy*. NMRW is the national repository for records of the archaeological, architectural and historical environment in Wales and is appointed as a place of deposit for public records under the Public Records Act

This means that all archaeological archives, without associated finds, created by any organisation or individuals, are accepted by RCAHMW for the NMRW. Archaeological archives with associated finds would normally be expected to remain together and be held

in an appropriate museum but RCAHMW would encourage a copy of the core paper/digital archive to be deposited in the NMRW along with details of the museum holding the original. In the event that a museum accepting or holding archaeological finds is unable to accept the paper and/or digital associated records these may be deposited in the NMRW. The NMRW holds extensive collections of photographs, surveys, maps, reports and digital data. The NMRW digital archive catalogue is available on the RCAHMW website and is linked to the national sites database.

3.3.4 Cadw

Cadw is an executive agency within the Welsh Assembly. Created in 1984, Cadw carries out the complete range of responsibilities for the conservation, presentation, and promotion of the built heritage of Wales on behalf of the Welsh Assembly Government. These duties include:

- Securing the preservation of ancient monuments and historic buildings.
- Grant aiding the repair of ancient monuments and historic buildings.
- Managing 129 ancient monuments in Wales, which are in direct State care.

Cadw see their funding role as being predominately the management of existing heritage rather than funding new excavations. They will fund limited excavation where a site is threatened by a natural process such as coastal erosion. Where a site of archaeological importance is threatened by development the developer is responsible for these costs. Other than part-funding the Curatorial Divisions of the WATs, Cadw has no direct role in the development control process.

Where Cadw support an excavation they provide a grant to the relevant excavators. As this support is in the form of a grant Cadw expects that organisations receiving this money conform to relevant industry standards. The records from any excavation work funded in this way must be passed to the RCAHMW (for the NMRW) on completion of the report, which should be within three years of completion of the field work.

Cadw will also fund threat-led assessments to survey areas of Wales to identify archaeological sites which may require protection. Whilst these surveys are not intended to generate finds, occasional finds may be made where there is an intrusive element to the project or surface finds have been made. These surveys may lead to excavation work, if a threat to the site is identified, but that excavation work would fall into Cadw's grant in aid programme.

3.3.5 National Museums & Galleries of Wales (NMGW)

The National Museums & Galleries of Wales was established by Royal Charter in 1907 (revised in 1991). It is an independent national body funded by central government through the National Assembly for Wales.

With seven sites spread throughout Wales, NMGW is a major multi-disciplinary museum. The purpose of NMGW is the advancement of education through study and interpretation of its collections of archaeology, art, biodiversity, geology and the social and industrial history of Wales. This is expressed simply as telling Wales and the world about the world and Wales.

The Department of Archaeology & Numismatics is one of the primary bodies in Wales concerned with the comprehensive interpretation of Wales's past, through its collection and preservation of artefacts. It promotes the archaeology of Wales through its public galleries, exhibitions and events as well as through the high profile gained by its fieldwork and research. As such it forms an important part of the consciousness of the people of Wales whose identity, as Welsh people, is rooted in their archaeology and history. The Department holds extensive archaeological collections and records in the National Museum & Gallery, Cardiff and the Roman Legionary Museum, Caerleon.

3.3.6 Council of Museums in Wales (CMW)

The Council of Museums in Wales (CMW) is a non-statutory body funded by the National Assembly for Wales. CMW works to improve standards in its member museums in order to foster the preservation of Welsh heritage and to further the educational purposes of museums in Wales. From April 2004 most of the functions of CMW will pass to CyMAL and CMW will cease to exist.

3.3.7 Core Archaeological Record iNdex (CARN)

CARN is being developed as the on-line public entry-point to the Extended National Database for Wales, a national information resource for archaeology and architecture compiled by archaeological organisations across Wales and is co-ordinated by RCAHMW.

At present records are included from the Clwyd-Powys Archaeological Trust SMR (Sites and Monuments Record), Dyfed Archaeological Trust SMR, Gwynedd Archaeological Trust SMR, Glamorgan-Gwent Archaeological Trust SMR, NMGW, Cadw's scheduled monument database and the Royal Commission's National Monuments Record of Wales.

4 Current Situation

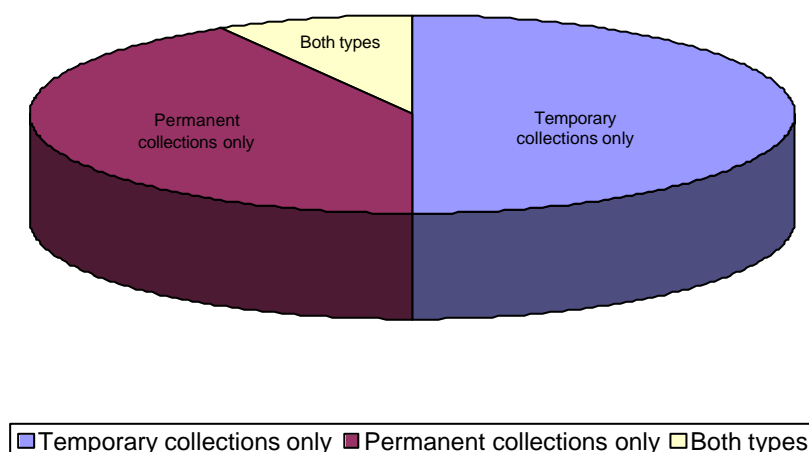
This section concentrates on the response to the questionnaire distributed in autumn 2002 to bodies working with Welsh archaeological archives. The organisations that responded can be divided into a number of different categories, depending on their function or constitution.

4.1 The Status of Welsh Archaeological Archives

4.1.1 Organisations Holding Archaeological Archives

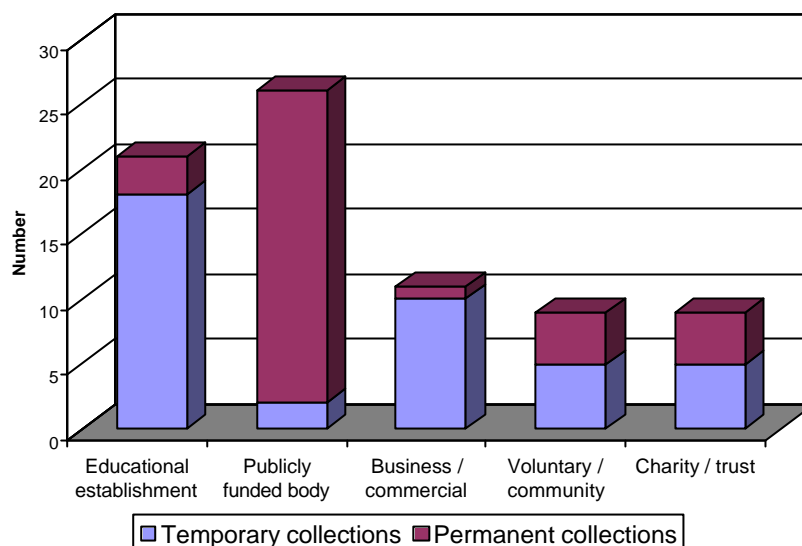
The most significant functional separation is based on whether an organisation is an excavating unit, which holds an archaeological archive on a temporary basis before passing it to a permanent repository on completion of the research, or a receiving organisation that holds collections, usually a museum. 42 organisations with temporary collections and 36 with permanent collections responded to the survey. Six respondents both excavate and hold permanent collections.

Graph 1 Status of Collections



It is also instructive to compare responses by organisational / constitutional type. The organisations that participate in the creation, care and access to archaeological archives have a variety of forms. The survey identified five different types of organisations holding collections: educational establishments; publicly funded bodies; business and commercial organisations; voluntary and community organisations; charities and trusts.

Graph 2 Constitutional Type



It is apparent that the sector is diverse and this research has revealed that there is a great deal of co-operation and innovation in the development of partnerships between the voluntary sector, academic institutions, businesses and public sector bodies.

4.1.2 Funding of Archaeological Excavations

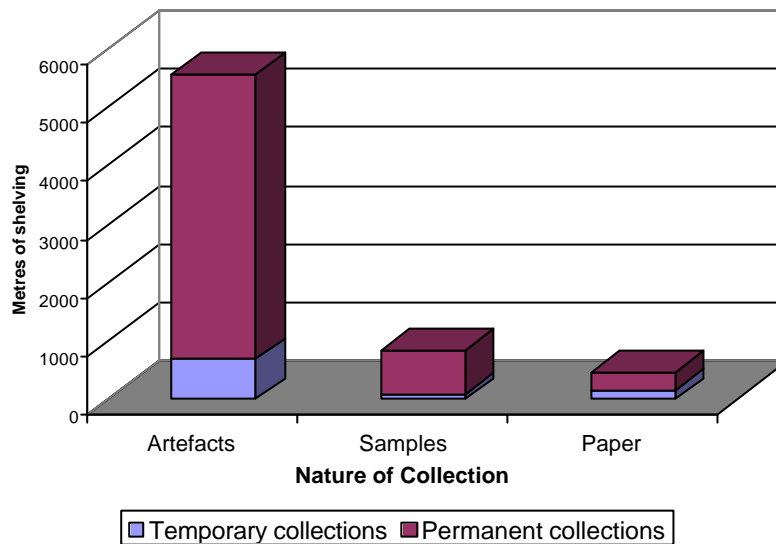
Funding for archaeological work arises from a diverse range of sources. Cadw has provided funding for primary fieldwork and assessments as well as limited excavations after threat related assessment. Other research work can be carried out by institutions such as NMGW, RCAHMW or universities. For the main part, however, there has been a large increase in the funding of archaeology by developers. As archaeology is a material condition in the planning system an archaeological field evaluation can be required prior to a decision being made on a planning application and following that determination conditions may be added to the planning permission for excavation prior to development or watching briefs carried out during the course of developmental work. The funding for this work is normally the responsibility of the developer.

The result is a picture of a range of funders, many of whom cannot be expected to retain the expertise to specify contracts carefully enough to ensure the sustainability of the archaeological archive.

4.2 The Nature of Excavated Material

The collections investigated for this report comprise of a wide range of materials. These include artefacts made of materials such as flint, stone, copper alloy, iron, leather, wood, glass; environmental samples of soil and charcoal; records including photographs, paper, drawings, maps and notebooks.

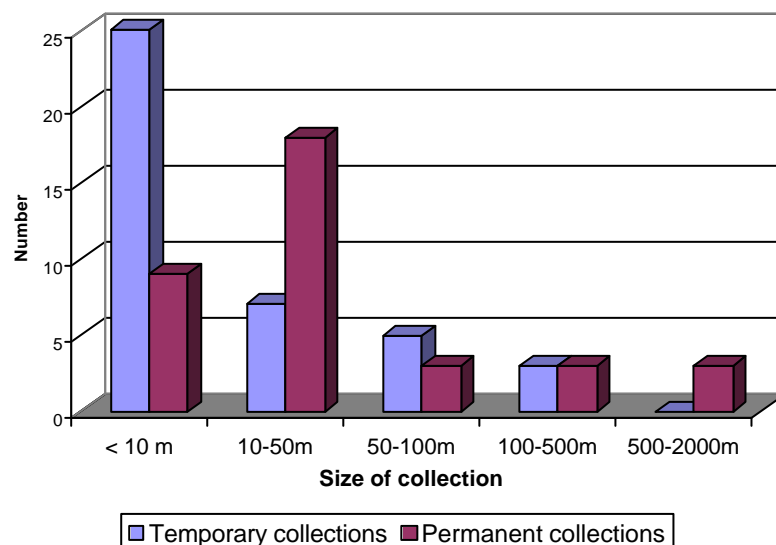
Graph 3 Nature of Welsh Archaeological Collections



4.2.1 Size of Collections

The collections held in Wales range in size from a handful of finds to many metres of shelving.

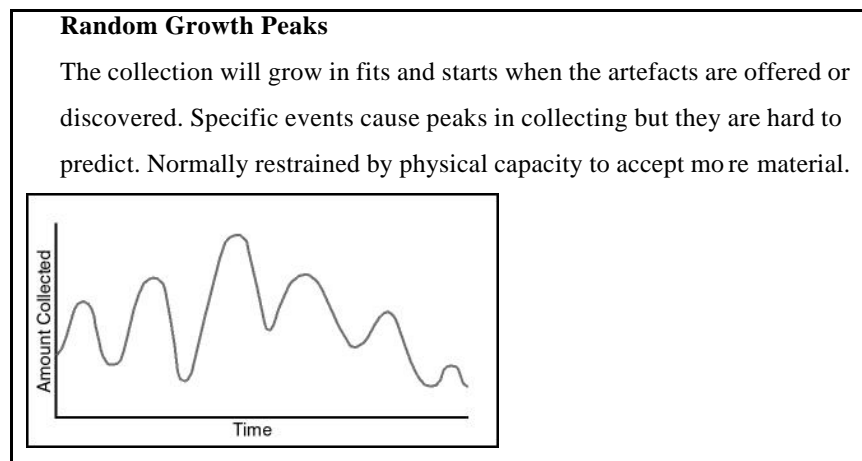
Graph 4 Size of Collections by Institution



From the consultation it is clear that excavators believe in most cases that the creation of sizeable archaeological archives from large scale rescue excavations is a thing of the past and that in future most evaluations will produce only one or two boxes of finds. Although this is generally true, areas with numerous developments can build up sizeable archaeological archives. Occasionally individual sites may unexpectedly reveal large amounts of material, such as the Newport Ship, and so the possible deposition of sizeable archaeological archives should not be ignored.

Most museum staff report that if an excavation producing one or two small boxes of finds or other material comes to them with a report it would present no significant difficulties, as long as they are kept informed from the beginning of the process. Of more concern to museum staff are excavations that produce material in larger amounts, especially material that is not easily displayable, such as environmental samples or large amounts of pottery sherds and animal bone. Given the lack of storage space in museums, curators feel that they need to be given advice on what they should be collecting and what may be disposed of once the excavation report is available. Obviously, this may not tie in with what is required of the archaeological archive from an academic research point of view and raises the question – is a museum a suitable repository for an archaeological archive?

Although excavators report that material was being generated much more slowly, this trend has yet to be felt clearly by curators of permanent collections. This is contributed to by the delay in transfer of materials (see 4.8.3) and the fact that curators have experienced little coherence in growth patterns in the past. Curators of permanent collections were asked to identify from a range of four graphs which one most closely reflected their experience (see Appendix A). The random growth peaks pattern was identified as closest to their own experience by 58% of respondents.



4.3 Standards in Operation

There are numerous standards in place. Listed below are those identified by respondents as standards that they use for the care of archaeological archives.

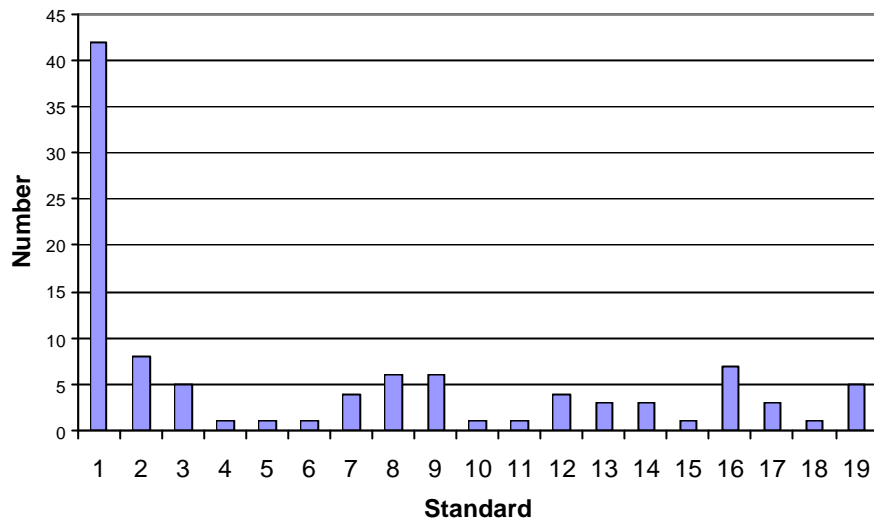
In Wales there is no requirement to adhere to any standard for the management of archaeological archives and as a result there is no single standard that emerges as the most significant. A full reference list can be found in Appendix E.

Graph 5 shows that just over half (51%) of the respondents claim that they use no specific standards in the care of archaeological archives.

Table 1 Key to Standards in Use

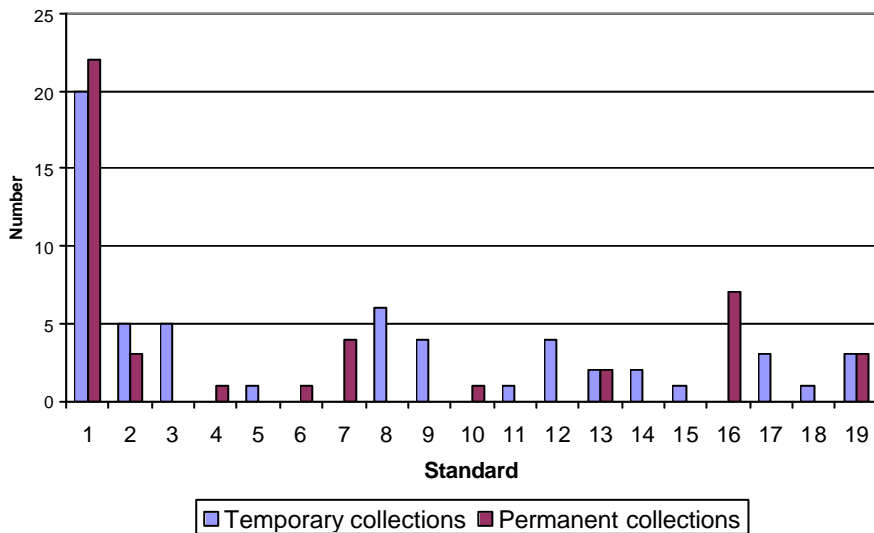
1. None
2. Internal documents
3. Guidelines from place of deposit
4. Borrowed from other organisation
5. Advice from NMGW
6. Commissioned advice
7. <i>SPECTRUM: The UK Museum Documentation Standard</i> , mda
8. <i>Guidelines for the Preparation of Excavation Archives for Long-term Storage</i> , UKIC
9. <i>Standards and Guidance for Archaeological Excavation</i> . IFA
10. <i>First Aid for Finds</i> Watkinson & Neal
11. <i>Wessex Archaeology Guidelines No 20</i>
12. <i>Towards an Accessible Archaeological Archive</i> , SMA.
13. <i>Selection, Retention and Dispersal of Archaeological Collections</i> , SMA
14. <i>General Standards for the Preparation of Archaeological Archives Deposited with the Museum of London</i> , Museum of London
15. RCAHMW / WAT cataloguing system
16. <i>Standards in the Museum Care of Archaeological Collections</i> , MGC
17. <i>Management of Archaeological Projects</i> . English Heritage 1991
18. <i>Strategies for Digital Data</i> , ADS
19. Other

Graph 5 Standards in use



Graph 6 shows that museums and excavators tend to use standards and guidelines from different organisations, with only SMA guidelines being used by one museum and one excavator. It is evident from this data that what is needed is not a new set of standards or guidelines, but identification and promotion of a common set of existing guidelines.

Graph 6 Breakdown of Standards Used

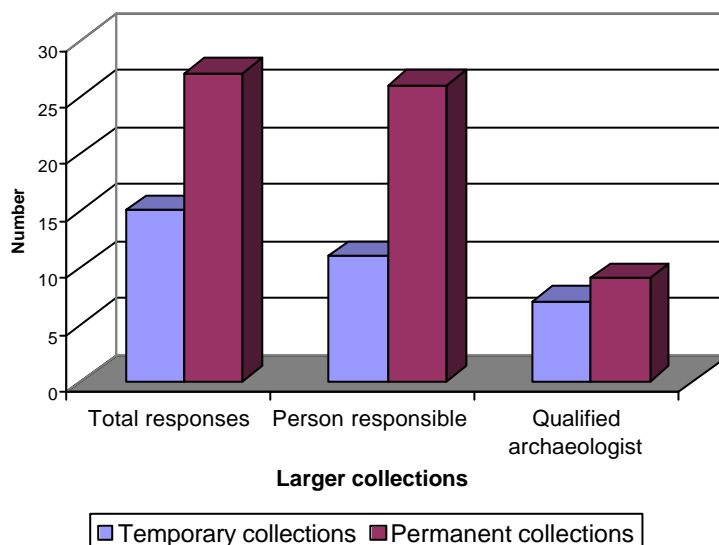


4.4 The Extent and Skill of Specialists in Wales

It is something of a truism that 50 years ago almost any small museum with only one member of professional staff would be run by an archaeologist. There remains a high representation of archaeologists amongst museum staff but this is no longer extensive and these staff no longer have the luxury of time to maintain their professional expertise.

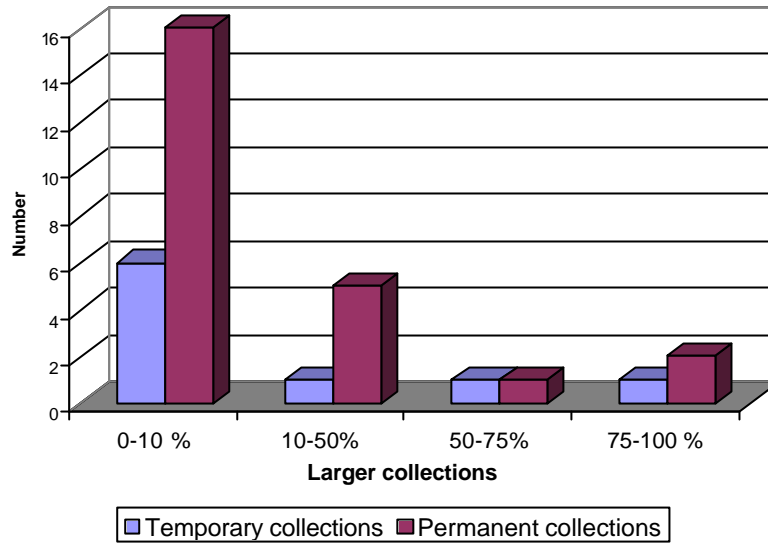
The survey found that most excavators had someone responsible for managing the archaeological archives with relevant skills and knowledge in archaeology. Museums had an even higher proportion of named people responsible for managing the archaeological archives, but a much smaller proportion of these were archaeologists or archaeological conservators. These figures represent institutions with collections occupying more than 10 metres of shelving.

Graph 7 Who is Responsible for Collections?



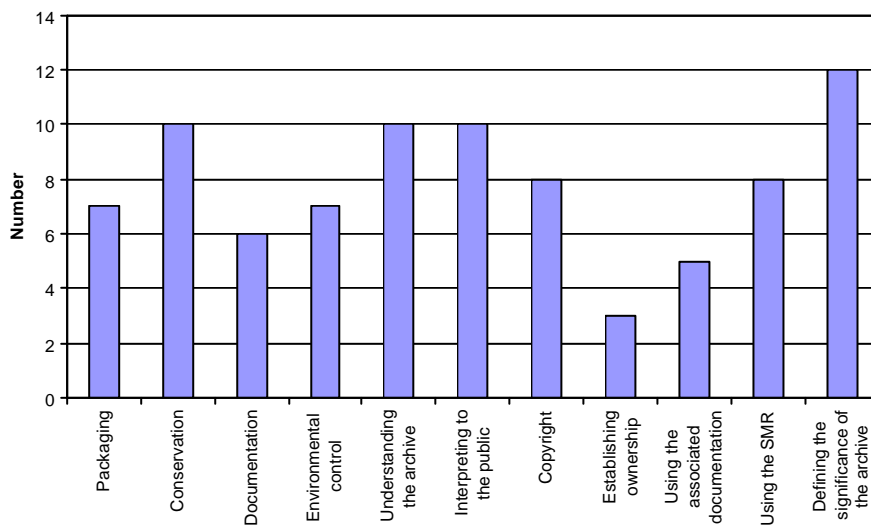
Even where collections have a named person responsible for managing them, the amount of time spent on this task is often very small. Only large organisations such as NMGW have the resources to commit to posts that are solely dedicated to the care of archaeological archives. This shows in the graph below. The NMGW are represented twice in the results, the National Museum & Gallery, Cardiff and the Roman Legionary Museum, Caerleon.

Graph 8 Time Spent Managing Collections



The research asked those who had permanent collections to identify the areas on which they would like advice and support. The following results show that the greatest area of concern lies in defining the significance of the archaeological archive, followed in equal standing by conservation, understanding the archaeological archive and interpreting it to the public.

Graph 9 Advice and Support



These results highlight the general concern amongst curators that they do not understand the collection well enough to interpret it. In the words of two respondents: *'we would like to employ a specialist archaeologist to systematically address all aspects of the care of this particular collection'* and *'[we] need support of a professional to record and repack'*.

For advice on conservation, organisations tend to take advice from people or organisations with whom they are already familiar. This usually means that they contact CMW to put them in touch with specialists, NMGW who they know have in-house specialists or private conservators with whom they have already had contact.

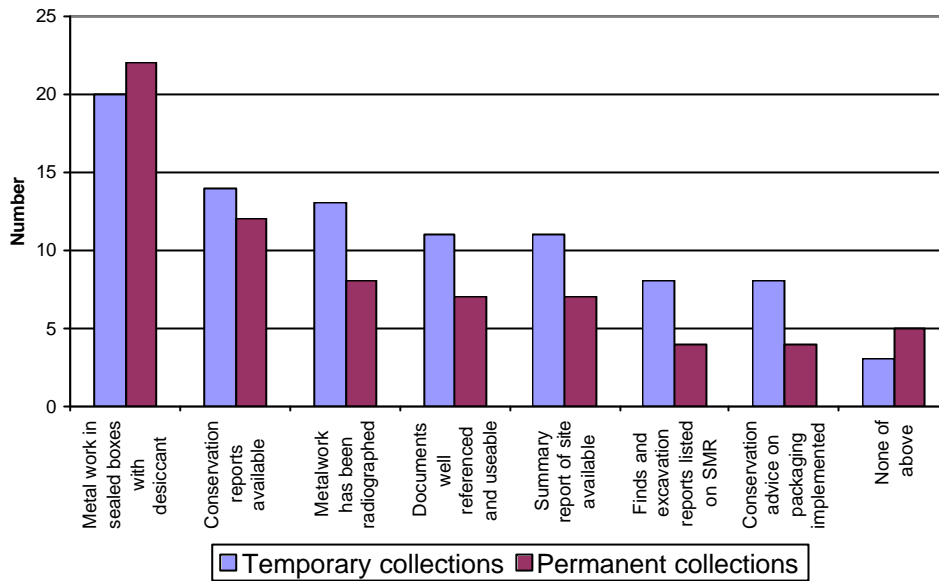
The situation as portrayed by these results is bleak. Many significant collections are held by organisations where no one is identified as responsible for them. Where a person is identified as responsible they have little time to commit to this activity. Many of those working in institutions with permanent holdings of archaeological archives do not understand what they have or how to interpret it. Although specialist researchers, who have their own expertise, are catered for, the general public are not well served by a museum profession that does not have the resources to interpret the archaeological collections.

4.5 Stewardship

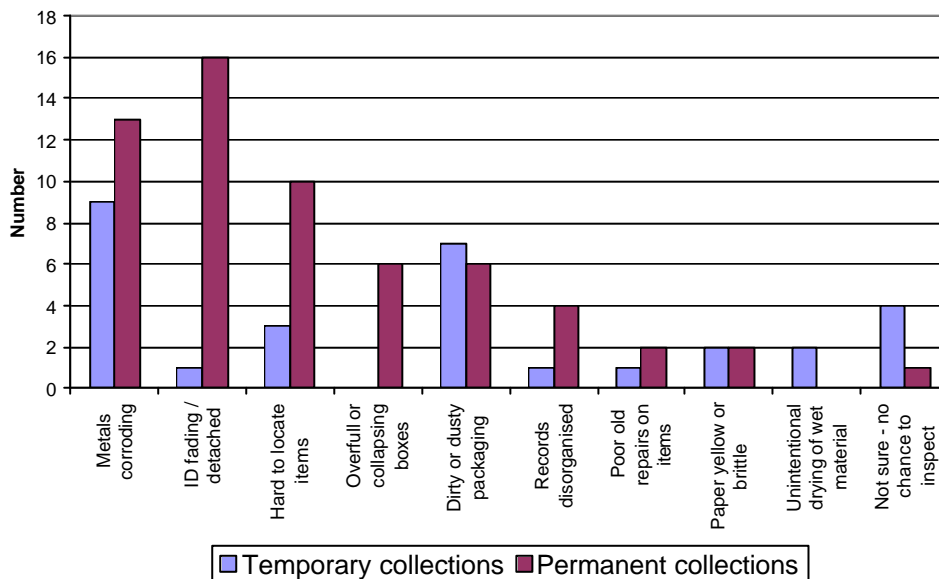
The physical state of archaeological archives, considering both artefacts and paper records, was examined in the research. The results show a distinct pattern for permanent and temporary collections, which can be explained by their nature.

1. The first graph summarises positive aspects of collections care, such as metals boxed with desiccant, conservation reports available, metalwork radiographed etc. Both temporary and permanent collections show a similar pattern.
2. The graph that follows summarises the information on visible problems with collections and shows a marked difference between the permanent and temporary collections. This can generally be linked to the length of time that collections are held by an organisation.

Graph 10 Care of Collections



Graph 11 Visible Problems of Collections



It is interesting to note that while almost all temporary collections are showing very few problems in terms of information and paperwork, a significant number reply that metalwork is deteriorating and packaging is dirty or dusty. If standards were being followed then metalwork would be correctly packaged with a desiccant and should not show signs of damage in such a short period of time.

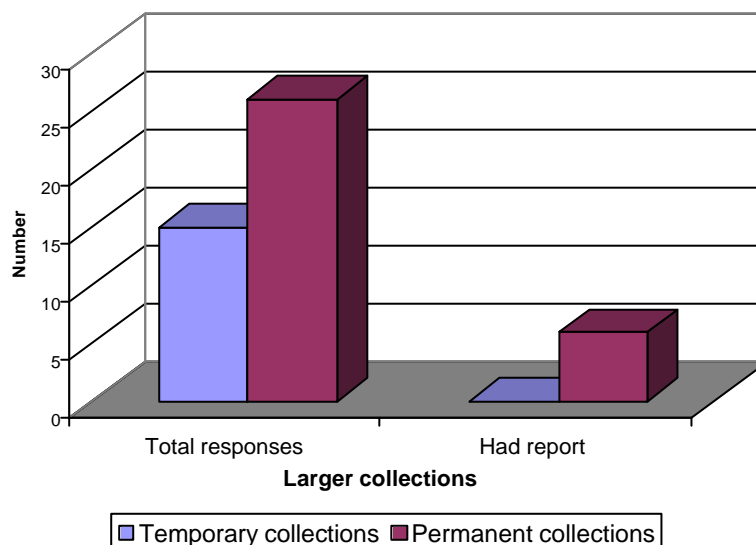
It appears that whilst good practice from excavators is initially retained by museums, faults are never addressed. Over time the collections become neglected and decay. In

particular the loss of identification information will lead to a significant loss in value. This form of loss is as significant as collections simply being thrown away, since without documentation collections are nearly worthless.

4.5.1 Collections Management

Although many organisations have identified that there are problems with the collections, there are very few that have quantified this by having condition surveys to assess the nature and amount of damage that is taking place. It is clear that deterioration is occurring to a significant proportion of archaeological collections held in both temporary and permanent collections. Without basic data on condition, organisations cannot identify targets for performance, nor monitor the effectiveness of their actions. This leads to a lack of accountability of an organisation for the preservation of this national record. One museum summarised their situation as *‘the archaeological archive is dispersed and the records are missing’*.

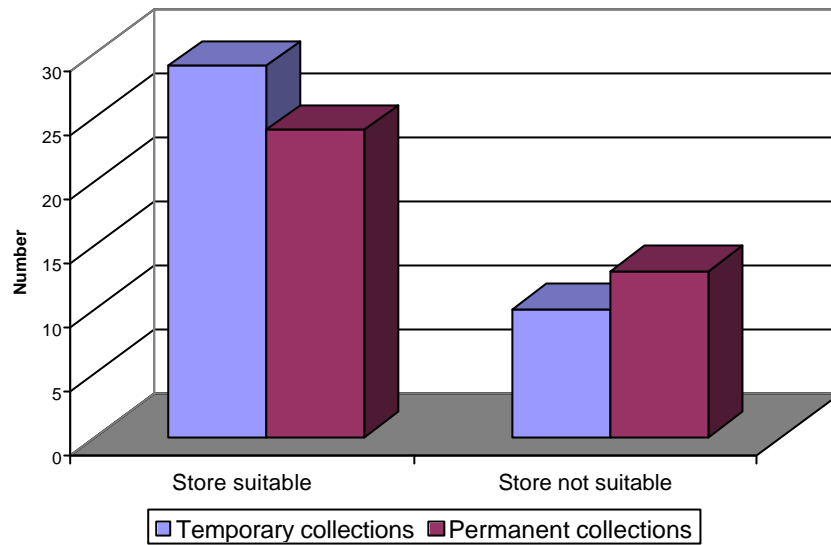
Graph 12 Report on Care of Collections



4.5.2 Storage

The researchers asked whether organisations considered that their stores were suitable for the storage of archaeological archives. Approximately 75% of excavators stated that their storage was suitable for archaeological archives, but a significant number of these qualified this with comments such as *‘But only for temporary storage’*, *‘no choice’*, *‘limited space and access’*. Even more worryingly 33.3% of permanent collections are described as *‘being in unsuitable stores’* by their curators, with several commenting specifically on the poor environmental conditions and lack of space.

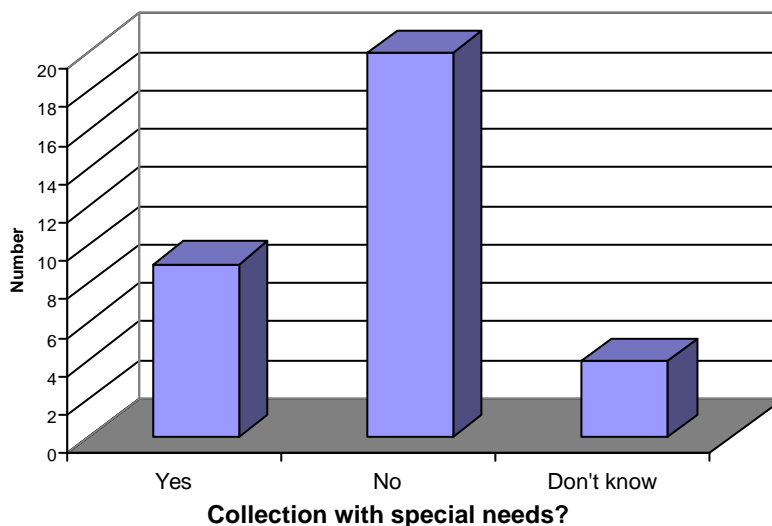
Graph 13 Assessment of Stores



4.5.3 Special Needs of Collections

Those organisations with permanent collections were also asked to identify whether any collections with special needs were held. Of those that answered yes, almost all were with regard to waterlogged material, in particular waterlogged wood. This suggests that wet organic material, especially waterlogged wood, presents a distinct problem for a small but significant group of museums.

Graph 14 Permanent Collections with Special Needs

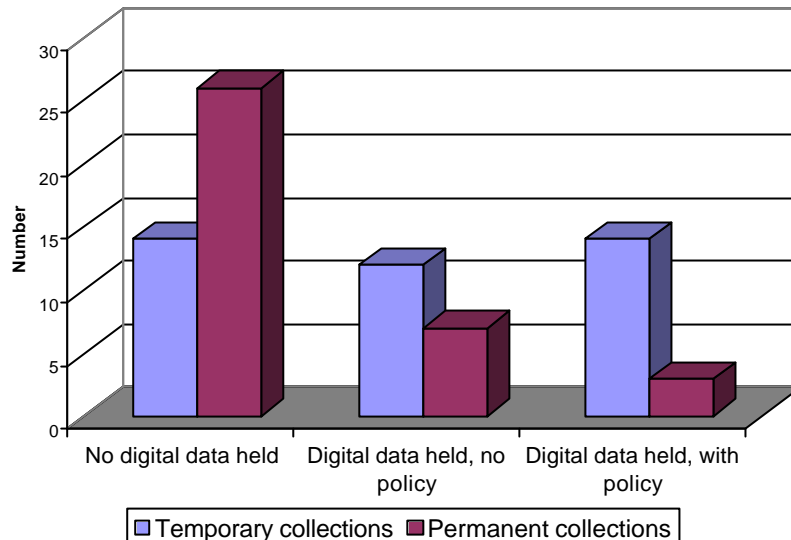


4.5.4 Digital Records

In addition to the traditional paper records many excavators are creating and managing digital records of their work. The survey showed that 65% of organisations with

temporary collections and 28% with permanent collections had digital materials in a range of formats including 5.25" & 3.5" floppy disks, 'Zip' disks and writeable CD's.

Graph 15 Archaeological Archives with Related Digital Data



From the results it would appear that excavators are moving to digital formats and it is inevitable that as sites are completed and records transferred, increasing numbers of museums can expect to receive digital records. These records can form a primary record of the site and are therefore unique and invaluable. The survey revealed that nearly half of excavators and the majority of permanent repositories have no policy that relates to the preservation of digital materials. Information held in digital form is vulnerable to loss through the decay of carriers or the obsolescence of the related hardware or software.

Case study

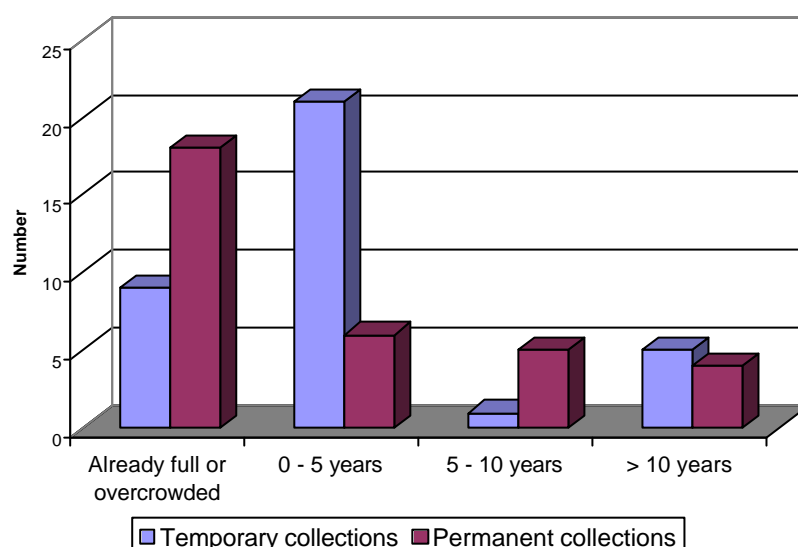
Following a review of procedures CPAT decided to implement a policy for management and back up of digital information. They noted that some survey data may never generate a paper record and as a result decided that a back up was necessary. For every project they operate a dual back up system. Two copies of every floppy disc or CD are created: an archive copy and a back-up stored in separate locations. In addition each record is stored in two different formats, for example text in Microsoft Word and rtf files and CAD in GIS and dxf files.

Although the policy is implemented for new records they still have a backlog of material. This includes information that exists nowhere else except on single 5.25" floppy discs. CPAT plan to retrieve this data and still have two machines that can read 5.25" discs.

4.6 The Existing Provision and Approximate Capacity for Continued Collecting

Research shows that the vast majority of museums in Wales are over-full and that none have more than ten years growth capacity. The situation is already at a critical point. Lack of space leads to lack of access and is highly likely to compromise the preservation of the collections.

Graph 16 Capacity for Continued Collecting



This response corresponds to a statement made in The First Report of the All -Party Parliamentary Archaeology Group (Jan 2003: 157, pg 33), which notes that the problem of storing archaeological archives in museums has reached crisis point.

4.6.1 Building Conservation

There is also a welcome growing trend in Wales for conservation architects to employ archaeologists for watching briefs during work on historic buildings. This is particularly apparent on work on listed churches and has been accelerated by the funding and requirements of the Heritage Lottery Fund. Most individual sites do not at present generate significant volumes of finds, and so this area is not a central focus of the report. However, on occasion, sites can generate large volumes of material.

Case Study

As part of a programme of repairs of an historic church, graffiti was discovered on the roof lead. This graffiti was identified as historic and of considerable interest. The local museum, Caldicot Castle, was approached to store pieces of the roof. Whilst the find is undoubtedly of interest the size of the pieces present a major storage problem.

It is therefore apparent that the building conservation community should be considered in any discussion about good practice standards and preservation by record and should have access to the consultation process and participate in any relevant solutions.

4.7 The Costs of Storing Archaeological Archives

Swain (1998) in a report on archaeological archives in England found that the cost of keeping collections was hard to research (18 out of 100 responses completed relevant details), but found that costs were related to the size of the organisation, their overall costs and their commitment to the archaeological archives.

No organisation in Wales is solely dedicated to the access and maintenance of archaeological archives so there is no simple way to calculate the relationship between the costs of that organisation and the volume of material kept. However there are a number of different methods by which a framework of the costs could be established.

Table 2 Indicators of Costs

Source	Calculation
Lord, Lord & Nicks (1989), <i>The Cost of Collecting</i> , HMSO	A figure of £120 per m² calculated as the operating cost per annum of curating collections.
English Heritage box grant scheme	£13 per 0.017 m ³ (Stewart Box ‘Giant Storer’, 323 x 323 x 158 mm) Calculation of 57 Stewart boxes in 1m ³ Equates to £746 per m³ .
Hedley Swain <i>A Survey of Archaeological Archives in England</i> .	£34.30 per m³ for museums £22.50 per m³ for excavators
Oriel Ynys Mon, Anglesey Conversion of meeting room to store for archaeological archives.	Creation of approximately 60m of shelving. The room previously generated an annual income of £3,000. Equates to an operating cost of £50 per metre of shelving per annum.

These figures represent a range of different approaches to calculating the cost of storing collections. In order to increase the response rate and accuracy of responses the survey asked respondents to measure the volume of collections by metres of shelving (Appendix A). The following calculations of operating costs are based on

the replies from organisations with larger collections (>10m) that have fully completed the relevant questions (21 replies).

Table 3 Calculating Operating Costs

Element	Basis of calculation
Costs of running the museum	Each museum provided a figure for the total budget of the organisation, <i>Q32</i> .
Cost of storage in the museum	Based on <i>The Cost of Collecting</i> , the assumption is that storage consumes 20% of a museums resources.
Percentage of collection which is archaeological archive	Each museum responded to <i>Q 17</i> , ' <i>What percentage is archaeological archive of your total collection</i> '. The midpoint of the bands has been taken for each reply (2.5%, 12.5%, 35%, 65%, and 90%).

$$\text{Archaeological archive operating costs} = \frac{\text{Cost of all storage in the museum}}{\text{Percentage of collection which is archaeological archive}}$$

As we know from the survey responses how many metres of archaeological archive each museum holds the operating costs for the museum storage of archaeological archives can easily be converted to a cost per metre. Based on these calculations, the average figure for the cost of storing archaeological archives is **£116 per metre** of shelving per annum.

For comparison with other figures it is useful to convert this operating cost to a cost per square metre, per cubic metre and per box.

A presumption of this survey is that cost calculations should be based on a real store and not the theoretical packing of a cubic metre. In order to facilitate access to collections, storage must be sufficiently well organised and not over-crowded. This means that corridors must be kept clear, shelving be sufficiently sized to allow lids to be opened and sufficient working space adjacent to collections to place a box on a table and retrieve and study an artefact or record.

Table 4 Converting Figures for Operating Costs

Space	Calculation
Box conversion	Each 1 metre length of shelving will hold 3 'Giant Storer' Stewart Boxes.
Area conversion	One square metre could contain: <ul style="list-style-type: none">• 2 x 1m shelves back to back Total of 2 metres of shelving or 6 boxes per square metre.
Volume conversion	One cubic metre could realistically contain: <ul style="list-style-type: none">• 3 x 1m shelves in height• 2 x 1m shelves back to back Total of 6 metres of shelving or 18 boxes per cubic metre.

Table 5 Operating Costs

Space	Cost
Per metre	£116
Per box	£38.66
Per square metre	£232
Per cubic metre	£696

From the table above (Table 4) it can be seen that the calculated figure of £696 compares closely to the English Heritage figure of £746 m³, although the cost per box calculation is considerably higher as our figure allows access and circulation space.

It must be stressed that the figure of £696 per cubic metre is not precise due to the various estimates that have been made during data collection and calculations. However, it is reasonable to assume that the figure is between £500 and £1,000 for most institutions and an average figure of £700 would not be unreasonable.

4.8 The Relationship between Museums and Archaeological Services with regard to Deposition of Archaeological archives

Excavators have reported to the researchers a clear message that they experience significant problems from the lack of a unified approach to collecting across Wales. Whilst in some limited areas the relationship with the local museums is clear in other parts of the country there are no natural homes for the collections.

Case study
 Oriel Ynys Mon expect to receive all material excavated on Anglesey and Gwynedd Archaeological Trust find this an easy arrangement to work with.

Case study
 Clwyd Powys Archaeological Trust (CPAT) has experienced many difficulties depositing collections in NE Wales in particular Conwy, Denbighshire and Flintshire. Some improvements have been seen, for example the county archaeologist for Denbighshire is developing a store and following developments the museum in Wrexham has been able to increase their collecting. However, excavated material that is decades old remains in the Trust's store as there is no place of deposit for two counties.

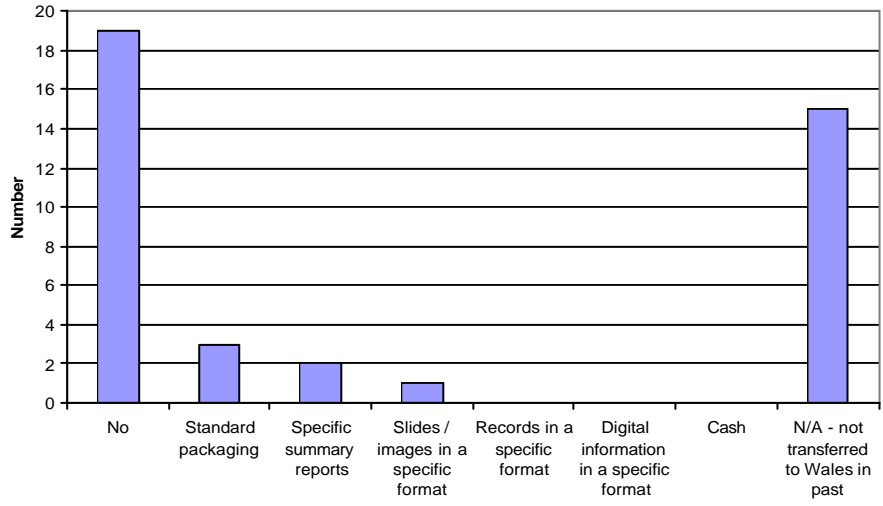
Case study
 The Vale of Glamorgan has no local museum which is suitable to receive archaeological archives so material and archaeological archives of local significance are having to be accepted into the national collections in NMGW .

4.8.1 Management of Deposition of Collections

A clear message from the research was a request for a simple and agreed process for transferring material. Many respondents made comments such as: *'we need single simple transfer standards'*; *'we need to be involved at an earlier stage of the excavation process'*; *'we need standards for transfer, advice on retention and disposal'*. In addition there are serious communication problems arising, such as units complaining that *'museum staff do not reply to their letters'* and museums being unable to decide on how much of the archaeological archive to retain because they had not been supplied with excavation reports.

In order to investigate the extent of the active management of transfer of archaeological archives, excavators were asked (Question 45) whether they had been asked by museums in Wales for material to be supplied in any specific format or with funding.

Graph 17 Deposition of Collections



Where specific guidance has been supplied it has come from a small group of museums, the NMGW being the most significant. A much more typical situation was described by one of the curators interviewed following the survey: *‘we ask for material to be “conserved, packed and well documented” but we do not have any written guidelines setting that out. I would welcome written guidelines as long as they are not too detailed – maybe 3-5 pages.’*

However, simply having a policy for deposition of finds is not necessarily enough. Curators from Swansea Museum, which has an excellent deposition policy, complain that they are not kept informed of the work that is taking place in their collecting area. There needs to be closer links between planning archaeologists and museums to ensure that when work is taking place the local museum is informed.

The survey identified 155 archaeological projects that generated archaeological archives to be deposited in Welsh organisations. Almost 25% of these projects are due to be deposited at NMGW, although several projects are the subject of talks between NMGW staff and the excavators about whether the collections should be deposited at NMGW. The NMGW is the exception amongst museums in Wales, having information on almost all of the projects that were identified by the survey as due to be transferred to the museum, although on some occasions the information amounted to initial telephone conversations.

Removing NMGW from the survey results leaves a worrying picture where 113 projects are listed as due to be deposited, but only 15 (13%) of these are known about by museums. Even more worrying is the amount of finds awaiting transfer. Excavators report 514m of collections awaiting deposit in museums, yet the museums expect only 31m (6%) of collections to be deposited. When the fact that over half (53%) of museums replied that their stores were already full or overcrowded is taken into consideration it is clear that museums are facing a potentially disastrous situation. Again this reflects the APPAG description of the situation as ‘in crisis’.

Several additional points should be taken into account when looking at these figures. Two or three replies to the survey stated that there was ‘lots’ to transfer, or were not able to provide details of the size of their archaeological archives. In addition the return rate from excavators was 67%. Although the authors consider that many of the major excavators have replied to the survey, experience suggests that there is likely to be one or two with significant archaeological archives who have not replied. It should

be stressed that the figure of 514m awaiting transfer is an absolute minimum. Figures based on compensating the results from 67% to 100% would result in a backlog of 767m.

The backlog can be further quantified in terms of the cost to store the material in a similar pattern to current storage at a rate of £116 per metre. This results in a backlog of between £59,624 and £88,972 per annum additional operating costs to non-National Welsh museums.

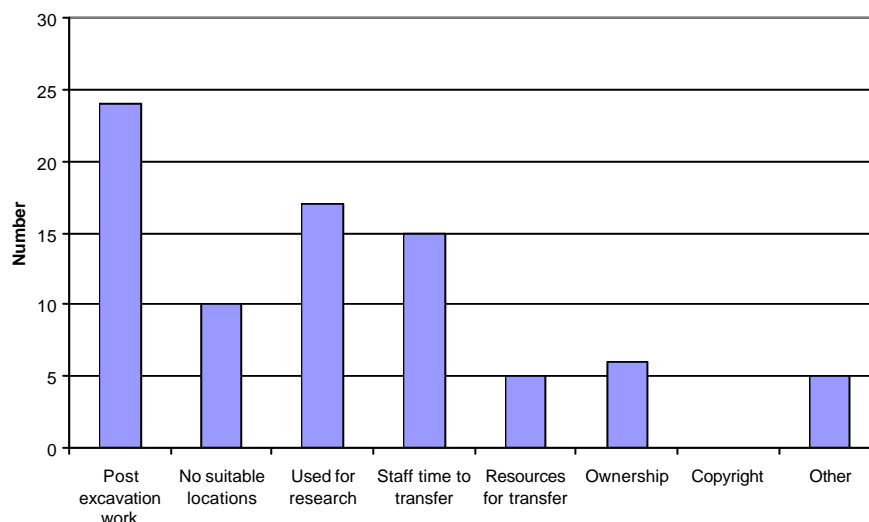
4.8.2 Transfers from English Museums

In tandem with this project CMW approached English museums on the borders and asked if they held any collections that they were likely to transfer to Welsh museums. The result of this investigation is that there are no significant collections to be transferred.

4.8.3 Delays in Transfer from Excavators

Researchers were asked to investigate reasons for the delay in transfer of archaeological archives from excavators to museums. The following chart shows the reasons given by excavators for the delay of transfer of finds from excavations undertaken prior to 2000.

Graph 18 Reasons for Delay in Transfer



Respondents highlighted the need for continuing with post excavation work and publication, followed by the fact that the collections are still in use for research and

the time taken for staff to prepare the archaeological archive for transfer. This must be seen to conflict to some degree with the verbal reports of excavators who state that the delays in transfer have significantly decreased and that the most significant problem is the lack of suitable places of deposit. This result must be considered in the context that most excavators report that their stores are only suitable for the temporary storage of material. Delays in transfer force this inadequacy to the fore.

4.9 National Collections and Local Communities

The consultation process highlighted historical differences that have occurred regarding the allocation of collections between national and local museums. There are reports of confrontation in the past about how things have been deposited. Areas of concern include NMGW staff collecting from the best sites in a region where the regional or local museum staff felt they should have had a claim to that material. The most commonly expressed complaint was of collections disappearing to Cardiff, many years ago, never to be seen again. Additionally there were reports of tensions between local and regional museums such as some museum staff ‘cherry picking’ individual finds from sites leaving others to accept an incomplete archaeological archive. Many professionals in the sector have expressed concern about important small finds being separated from the remainder of the archaeological archives.

However, there was more strongly a feeling that the current situation was moving to a positive and co-operative framework.

Case Study: The acquisition of a gold coin from Caersws

NMGW staff informed the local museum’s curator of its availability at auction. The NMGW staff established whether the curator wanted to purchase the item and because she did they agreed not to bid against. NMGW staff also provided professional support to assist with the purchase. The curator felt it was a very positive experience and considers that museums should actively support loans both to and from national collections.

Another potential area of conflict arises where the NMGW carry out their own excavations. On the one hand their excavation strategy is to compliment and develop national collections, on the other they may excavate in an area where all finds would usually be passed to the local museum. Whilst almost every professional accepts the premise of a national collection they will always experience a feeling of loss when the collecting policy of the national museum cross-cuts over their collecting area. The challenge therefore, lies in how the situation is managed including arrangements for local display of national collections.

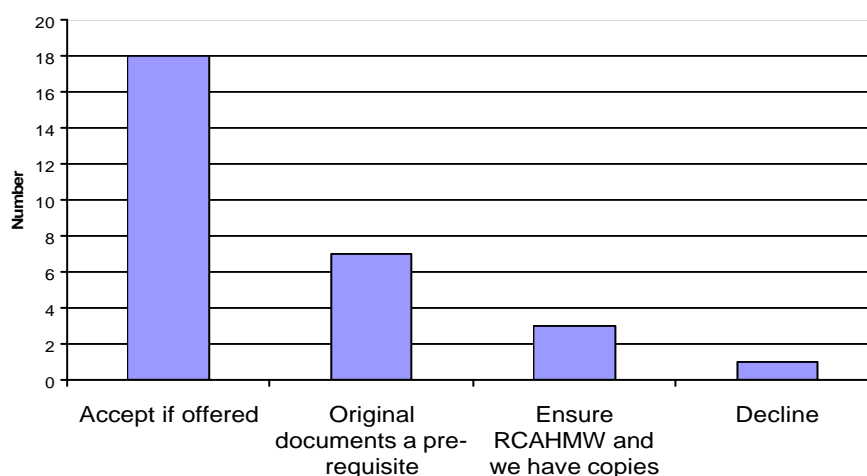
All consultees reported a wish to ensure the continued exchange of expertise and many specifically mentioned that they valued the advice and support of staff from NMGW. Most museum staff were aware of, and sympathetic to, the stewardship requirements of preservation and security, which can limit opportunities to display national collections but all were keen to explore options for local access to national collections. The recent WAG-supported pilot partnership scheme *Cyfoeth Cymru Gyfan - Sharing Treasures* provides grants for regional museums to raise standards to allow display of national treasures is considered an excellent example of the way forward. Many requested an extension to the scheme providing additional support to local and regional museums and to NMGW to support this partnership.

4.10 Relationship of Finds, Samples and Documentary, Digital and Photographic Records

The consultants were asked to investigate how artefacts, environmental samples and the associated records were deposited. Those organisations with permanent collections were asked to comment on their policy for collecting associated records with their archaeological archives. The results show a very mixed picture.

Some differences of opinion exist as to what is best practice. Most publications state that the final report and all associated records should be transferred with the finds archive to the museums, and that a copy of the records should be placed with the national collecting body (RCAHMW). In practice many museums only wish to receive a copy of the site report and an inventory of the remaining records. Many excavating units also wish to retain records as they believe that researchers will approach the units rather than the museums to seek out this information.

Graph 19 Collecting the Documentary, Digital and Photographic Records



The results indicate a significant lack of awareness of the best practice in collecting records. It appears as if most collecting organisations have a reactive strategy rather than defining their needs or consulting with a national body such as RCAHMW.

Evidence from the survey and from further consultation shows that even where a policy existed, consultation indicates that this is unlikely to have a clear strategy for digital materials.

Case studies

One **museum** had a clear policy to collect original site records with the artefacts which they strongly enforced. However although they had accepted copies of digitally produced information, they had taken no steps to request original copies of this information.

CPAT expect to retain the original archive and pass the site report on together with an index. They consider that most researchers will go to them first and that this policy will therefore be most convenient.

RCAHMW state that they are happy to accept either the original documents or copies (Appendix 3), which they will reference back to the source museum and curate as original documents in the NMRW.

NMGW states that they take the paper records associated with archaeological archives if they are offered.

Cadw stipulate that an excavation report must be completed and a copy of the archive deposited in the NMRW within 3 years of the completion of the fieldwork.

Any nationally agreed format for the transfer of the records must aim to work towards uniformity whilst considering the differing needs and preferences of those working in the sector.

During the research it has become obvious that a major concern to many in the archaeological profession is the 'grey literature' generated by developer-funded projects. In many cases the reports are produced for the developer with a copy placed in the SMR, but it is felt that there is little dissemination of information. Richard Avent, Cadw, recently stated that, '*...specifying proper public deposition (with confidentiality restrictions where really necessary) must be a priority*', (Avent, 2002).

Also, a point that was raised during consultations was that of who pays for the copies? Copying of documents, photographs and specialist survey material can be an expensive process and it may not be viable for smaller organisations that wish to keep paper records to also make a copy for RCAHMW. Obviously, as more information is processed and produced using computers, the costs of copying are greatly reduced,

but consequently it becomes essential that organisations holding digital data put in place a policy for maintaining the data.

It is also important to note the status of paper and digital archives within the archaeological archive as a whole. The WATs in particular are housing a large amount of original records as part of the SMR. However, these organisations do not apply the standards required by BS5454 nor are they registered as a place of deposit. Coupled with the fact that the WATs are charitable bodies and not statutory organisations the valuable data provided by the SMR is at risk due to both long term deterioration and cuts in funding to the Trusts.

4.11 Timing of Deposition

Archaeological archives can be deposited as a whole on publication of the report, or in parts as sections of the material have been researched and are ready to be archived. It should be noted that the landowner retains the legal title to the archaeological material and can refuse to allow it to be transferred to a museum. Both methods of deposition operate in Wales. There are advantages and disadvantages in either method, deposition as a whole prevents the separation of objects from their records and the disassociation of parts of the collection. However the process of research and publication can be time consuming and the excavators may not have the resources to care for the collections adequately during this time. Access to the public is also usually limited during research as excavators are not necessarily obliged to perform this task.

Consultation revealed a strong preference for depositing collections as a whole, based largely on anticipated reduction on the time it would take for archaeological archives to be prepared in the future. Cadw stipulate that an excavation report must be completed and submitted for publication within 3 years of the completion of the fieldwork.

The researchers consulted widely about defining a reasonable amount of time for excavators to prepare a report following fieldwork and deposit the archaeological archive. This is, in effect, looking for a definition of ‘temporary’ relating to the temporary holding of collections. This definition is required, since excavators have collections that have been held for decades yet they still describe them as temporary collections.

There will be occasions when items require longer, more detailed research, such as conservation of larger timbers that have to be consolidated, but these will be exceptions. Nonetheless if collections that are to pass into permanent collections are held for a significant length of time they should be offered the same standards of care as for permanent collections in registered museums. Most respondents agreed that a period of five years from excavation to deposition would be generous in all but exceptional circumstances. It was also suggested that for work carried out as part of the planning process an evaluation archive could be expected to be deposited within 12 months, regulated by the Curatorial Division of the appropriate WAT.

5 Welsh Universities

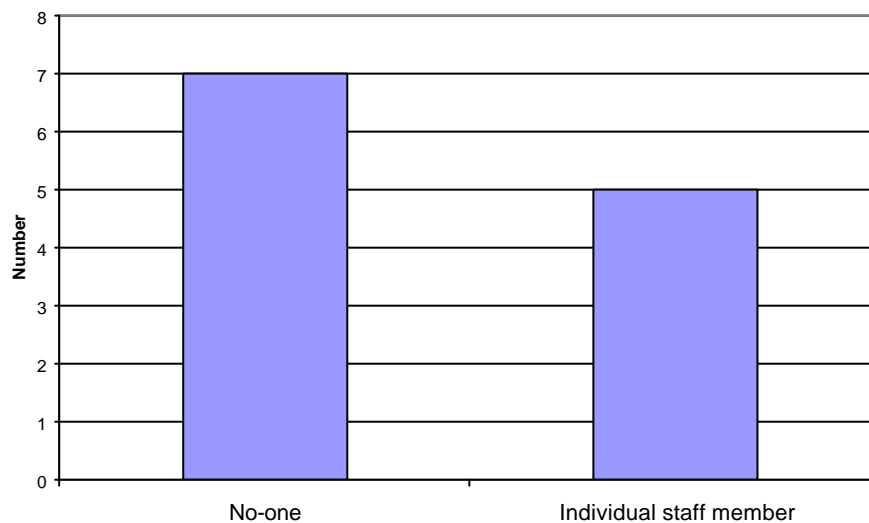
During the project the researchers identified a specific group amongst the respondents which had particular problems in common. This relates to collections held in universities in Wales. The results of the survey showed that universities present significant problems in three important areas:

1. Collections Management
2. Policy
3. Access

This is of concern as universities often hold large collections of highly significant material.

5.1 Collections Management

Graph 20 Who is Responsible?



From 12 responses from Welsh universities, seven had no-one identified as being responsible for managing the archaeological archive. In all but one case those that did identify a person responsible named the individual staff members who had carried out the project work. The role of managing collections is not written in their job description and all state that they spend only 0-10% of their time on the collection. These are staff with high teaching and research burden, for whom the responsibility of collections management appears to be notional.

Only two of 12 universities responding identified any standards in the care of collections as being in use. One of the two standards cited was an internal document which was not made available to researchers and the other mentioned '*much of our*

archive comprises environmental materials; soils, peats, sediments – which are stored following standard methods - airdrying, cold storage, freezing etc.’.

Only one out of 12 received any advice on the care of the archaeological archive, and this was provided by staff of the NMGW who are planning to accept the collection.

5.2 Policy

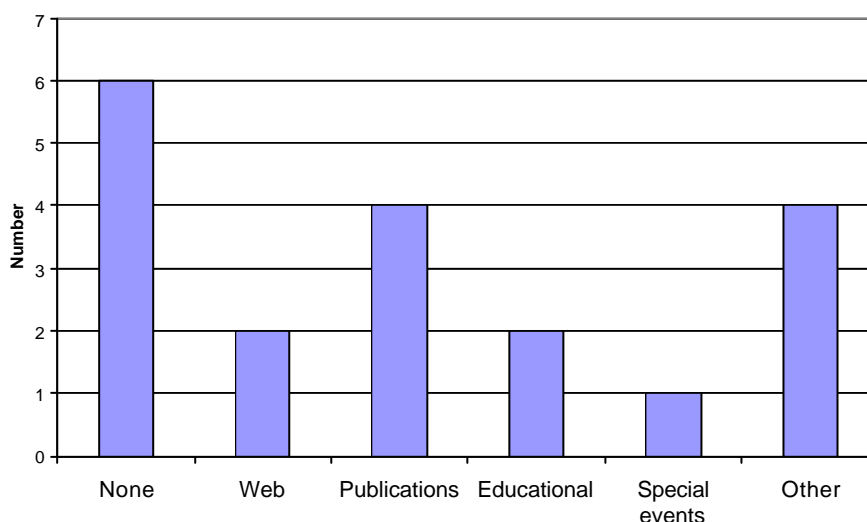
Most of the Universities in Wales holding archaeology have material that has been collected over decades. However, these are often viewed as ‘temporary’ collections. Accordingly there are none of the policies or procedures in place that would be expected for permanent collections. For example seven out of 11 respondents produced information in a digital format. Only one of these stated that they had a specific policy or guidelines for preserving the information, but this was ‘other means’.

5.3 Access

The questionnaire asked (Q15) *Do you have any arrangements in place for access to archaeological archives? Please provide details for the last year.*

None of the 12 university respondents identified any arrangements in place for access to collections. When questioned about provision of access through information media half of these said they provided none. Those that did provide access mostly did so on request, usually by other specialists or students. A small number provided access to the material through educational / teaching / handling classes.

Graph 21 Provision of Access



Universities are publicly funded bodies for whom excellence in management and research should be inherent. Universities train the archaeologists of the future and poor standards learnt at this stage could manifest themselves for years to come. The researchers believe that the problem is so significant and inappropriate to the scale and nature of the organisations and the collections held by them that specific recommendations should be made regarding how Universities manage their archaeological archives.

5.4 Dining Amongst the Bones

In 1999 CMW commissioned a survey of university collections, producing the report, 'Dining Amongst the Bones' (CMW, 2002). The recommendations of this report appear to have had little or no impact on the management of archaeological collections held by universities. Three of the recommendations made by 'Dining Amongst the Bones' which the consultants would strongly endorse are restated here.

'It is recommended that each HEI forms a University Collections Committee, which will draw up collection management plans and promote inter-departmental sharing of expertise between collections, held within the confines of their university.'

'It is recommended that acquisition and disposal policies should be drawn up for all teaching and museum collections and that these be distributed between all the university collections in Wales.'

'It is recommended that CMW should discuss with the universities in Wales the creation and promotion of a University Collections Open Door annual event designed to increase public awareness and access to these collections.'

6 Arrangements for Access: Physical and Intellectual

Access to collections means more than simply providing physical access to the buildings in which they are kept. For a community to really engage with a collection they need to be aware of its existence and have sufficient support to understand it. People must also feel that they have the right to access the collection. Sadly many people feel excluded from facilities that provide access to heritage, so indirect access through means such as ICT and information in the press can help to encourage people to ask for access to the collections. ICT can also help to connect people to collections that are not held nearby or can easily be reached by public transport.

Access to archaeology is not simply about access to specific objects, nor simply to records through the internet – although both are desirable. Access to archaeology involves access to the process, the series of events from deciding to excavate through the initial research, tests and analysis to the excavation, then conservation and display. The phenomenal success of programmes such as Channel 4's 'Time Team' and BBC's 'Meet the Ancestors', reveals how wide ranging is the interest in archaeology.

6.1 Access to National Collections Locally

Oriel Ynys Mon is one of three sites working with NMGW in a partnership scheme, *Cyfoeth Cymru Gyfan - Sharing Treasures*, with grants to raise standards to facilitate loans and increase the local display of national collections. Many respondents noted that they would welcome the extension of the scheme. However, NMGW provides considerable expert support within the scheme, but does not receive additional funding as part of this scheme and needs additional resources in order to facilitate these loans. Any extension of the scheme would require funding both to regional museums for their activities and for any centre, such as NMGW, providing expertise.

For archaeological collections the major needs for display of important artefacts are environmental control, security and effective interpretation. This is usually achieved by the installation of high quality display equipment and an improvement of security equipment and procedures. As these steps would benefit all collections, improvements made for archaeological materials would raise the standards within museums for all of their collections. The impact of any capital investment would benefit museums beyond the display of the archaeological material and would benefit

the visitor experience even during periods when national collections were not on show.

6.2 Access for Researchers and Students

Several respondents to the survey identified problems with packaging, storage and a lack of space severely limited the amount of access to the collection. If storage is overcrowded it is impossible to make the collections available. Museums value their role as providers of access to specialists and see it as a mutually beneficial process. They are extremely frustrated when research opportunities are limited by lack of basic facilities required, such as a small space to work and sufficient room to actually reach and open boxes.

Case study

Monmouth Archaeology, who hold an extremely large archaeological archive from excavations in Monmouth, have had several researchers ask for access to the archaeological archive and are generally happy to allow this. However, they are very limited in space for researchers and the finds are not easily accessible to anybody who is not very familiar with the archaeological archive.

Excavators and researchers report that they have not experienced problems in gaining access to collections that they have deposited in museums. In general museums welcome interest in their collections and it is only resource constraints that limit access.

6.3 Access to the Public

Most respondents consider that it is the role of museums to provide access to the public. Most excavating units would be prepared to allow access to the public but this is unlikely to materialise as the public are often not aware of the collection. Some units considered it appropriate to interpret the sites and excavation process, and CPAT have produce excellent fact sheets for school children on the nature of archaeology.

Museums tend to display a very small percentage of the archaeological archive that they have in store. The lack of expertise regarding the collections is reported by many curators as being a barrier to changing exhibitions or mounting temporary displays of the reference and study collections.

Case study

CPAT have provided expertise to the 'Welshpool Evening Institute' working in conjunction with Powys County Council to offer classes in archaeology for local people. The classes were held in the local museum where CPAT have deposited collections. The classes were very popular and attendance levels were maintained throughout the course. As part of the programme museum staff also talked about collecting policy and education.

Although popular, the museum has very limited space and lacked the current ICT equipment such as a digital projector that would allow the teacher to interface with listings held on line. Despite these drawbacks this project is an example of what is possible.

Most discussion on access to archaeology concentrates on the display of a selected group of finds at the end of the excavation process. There are few examples of any 'whole life' interpretation of a site from discovery, through research and conservation to deposition. Newport Museum and Art Gallery have the exceptional situation of the recently discovered medieval ship. This has shown the phenomenal interest that can be generated in the process and finds from the site appeared almost immediately in the museum's galleries upon excavation.

It is worth noting that the Museum of London has engaged much more fully with the public and archaeology and have created a post of community archaeologist to work with local archaeology groups. This person provides professional support and assists with fundraising. This demonstrates both the opportunity for community participation with archaeology and the opportunity to develop capacity within communities in partnership with national agencies and businesses.

In Wales the Portable Antiquities Scheme has proved successful in promoting the recording of chance finds and broadening public awareness of the importance of such objects for understanding our past.

Some examples of good practice do exist, but unless museums have a professional archaeologist on staff they remain an exception.

6.4 Access by ICT

Cadw, RCAHMW (through the NMRW), NMGW, the WATs (through the SMR) all have valuable data on archaeological sites and collections in Wales.

All of these organisations provide access to this data through CARN which acts as a web based index to the more detailed records.

A number of successful initiatives illustrate the potential of using the internet to create access to collections and information. Access can be delivered in a number of different formats. For example, The Gathering the Jewels initiative displays digital images of archaeological 'treasures' from Wales. Together with its successor organisation, Culturenet Cymru, it has a role to play in promoting archaeological collections to a wide audience. Other approaches to access involve the provision of data about collections, such as the proposed Archives Network Wales (ANW) currently under development by the Archives Council of Wales (ACW). This project will provide access to catalogue information in Welsh archive repositories rather than digital images and is similar to CARN in that users must request access to full records once their location has been identified by an internet search. Access to information about collections can also be supplemented by additional interpretative materials to help users understand the data provided. Good examples of this include the CPAT education fact sheets online and the NMGW's website's children's fun pages.

Access via ICT requires that data is available in a useable format and requires the provision of hardware to allow the public to interrogate that data. As yet many museums have not exploited the opportunity of including ICT points in archaeology galleries to allow interrogation of such sites in proximity to the collections but as one consultee put it we '*would love to have access to the SMR though computers in museums that have collections*'.

At this relatively early stage in digital provision the opportunity should be taken to ensure co-ordinated developments to provide consistent information in a user friendly format. The Archives Task Force (ATF) has identified that although many of the steps are in place to ensure interoperability there need for 'leadership and monitoring to achieve consistency' to ensure that all data providers can participate in delivering a unified framework of service. The new SWISH (Sharing Web Information Systems for Heritage) project developed in part by RCAHMW will involve considerable data cleaning and enhancement to provide web-based access to detailed archaeological information and images. The project be designed to mesh in with other partnership projects, such as ANW and Gathering the Jewels.

Finally, the ATF has encouraged the sector to focus on users and to develop an increased understanding of what they want both from online catalogues, digitised content and assistance in best use of these Internet resources. This focus must remain a key objective for all digital access projects.

6.5 A Review of Access Provision

The examples cited signal the potential for good work with archaeological archives but sadly are not representative of practice across the community. The reports of cramped collections inaccessible to all due to poor stewardship and a lack of understanding of the resource, or of neglected collections held by Trusts waiting to find a permanent place of deposit and of publicly funded University collections, which have no mechanisms for offering public access represent a much more typical picture.

This supports the findings of the CBA's survey of user needs, 'From the Ground Up'. This UK wide report identified significant problems in information management including dissatisfaction with the structure of reports, burgeoning grey literature and delays and difficulties in accessing synthesised results of archaeological projects. Amongst their recommendations is the creation of a UK wide digital compendium providing current information on archaeological projects.

In addition the recently published WAG consultation document 'Review of the Historic Environment in Wales' has found that there are problems for users in accessing records because of the fragmentation of resources. *'We have found that the current responsibilities of the main agencies charged with collecting, curating and disseminating records to be fragmented and confusing'*. They recommend that links between those responsible for managing records are developed to encourage a holistic approach and that the establishment of CyMAL will assist with this process.

7 Copyright and Ownership of Archaeological Archives

7.1 Copyright

It is interesting to note that although this area was identified in the project brief as a specific concern, none of the respondents considered that it caused them problems in transferring archaeological archives. It is therefore for the researchers to determine if this response arises because there is no problem or because there is no awareness of a problem. For most museums the question of copyright is addressed during the process of deposition of a collection and ideally the transfer of title form should include the arrangements for transfer of copyright. However, following consultation it appears as if few museums have considered any aspects of copyright related to archaeology such as site photographs and digital images. This has not presented problems in the past as people have operated in the spirit of co-operation. Some consultees were reluctant to pursue the issue, expressing concerns that if awareness was to be raised on this issue it would increase the bureaucratic burden without having any beneficial impact on practice.

Whilst most receiving museums were not clear on copyright, some excavators were quite clear that they retained copyright on material produced during excavation but allowed all reasonable use. Where excavations are funded with public money the Crown obtains copyright and the work is freely available to the public. Reports from work that is not publicly funded remain the copyright of the author. RCAHMW ask that if these records are deposited with them for the *National Monuments Record of Wales*, copyright is assigned to them or the author agrees to allow all reasonable use of the information while retaining copyright. However some archaeological reports are sensitive and the authors do not always wish them to be in the public domain. Consultation with RCAHMW determined that they are prepared to accept such reports with an embargo on them, but that after an agreed time period they should be made accessible. As yet consistent practice has not been achieved in Wales although procedures are in place for this to happen.

At present the Archaeological Archives Forum (AAF) is developing earlier research by the IFA on the technical issues relating to copyright. Funding support is being sought for this work. The researchers believe that it is unnecessary to try and propose Wales-only solutions to copyright issues and that provided the AAF has appropriate Welsh representation on its panel the recommendations from the AAF research

should be implemented in Wales when they become available. The anticipated implementation in the UK of the recent European Directive on Copyright is expected to have a significant impact on this work.

7.2 Ownership

Most museums reported that they had clear collecting policies that provided a clear and useful framework for their collecting. Guided by the standards work of the mda and museum registration scheme, implemented through CMW, museums have received clear advice on transfer of title for some time. The responsibilities and procedures for transferring ownership on deposition are clearly set out and well understood by museums.

Units can experience more difficulties in establishing ownership of material from excavation, but these issues have to be satisfactorily resolved before archaeological work takes place. Problems can arise where there has been a considerable delay between excavation and deposition of the finds. All registered museums should refuse to accept collections unless this issue is clear and any breach of this standard should be dealt with through the museum registration scheme.

The most significant problems arise in the transitional period when items have been excavated and are being researched but have not yet been passed to a museum. In many cases the private landowners, public bodies or companies that have funded the excavation and own the land have established that they do not wish to take possession of the collection and transfer the collection to the Trust. In some cases they can assert their ownership (subject to the Treasure Act 1996) of the finds. However this process has not always been clear and the Museum of London (MOL) have commissioned research into legal guidance on how to ensure the smooth and clear transfer of title to collections. Again the researchers believe that unless Wales were to take a radical approach of copying the Scottish legal system of ownership automatically falling to the Crown then the results of the MOL research should be developed for use in the Welsh context.

8 Strengths, Weaknesses, Opportunities and Threats

A SWOT analysis of the situation for archaeological archives in Wales provides a useful summary and reminder of the key issues. This chapter concentrates on the most significant features of the sector in identifying strength weakness, opportunities and threats. The recommendations that follow are based on addressing the threats and taking advantage of the opportunities.

8.1 Summary

Strengths

Archaeological archives: a great resource
 Archaeology creates public interest
 Cooperation amongst professionals
 Size of the archaeological community in Wales
 Community and regional base of the WATs
 Raising standards through partnerships
 Expertise within NMGW

Weaknesses

No coordinated collecting strategy for Wales
 No unified standards
 No agreed policy on paper or digital records
 Inconsistent monitoring of deposition process
 A false distinction between excavators and places of deposit
 No single statutory agency
 No coordinated management of university collections

Opportunities

A bridge to the use of ICT for learners
 Developing web-based access
 Development and coordination of collecting policies
 Co-ordination of digital information
 Cadw and funders recognising standards
 Predicting the cost of accepting collections
 Curatorial role of the WATs
 Improving research and access through stewardship
 A national approach to the transfer of records

Threats

Overcrowded stores restrict access
 Difficulties in predicting the deposition of archaeological archives
 Orphan collections
 Sudden deposition to non-National museums
 Temporary storage becoming permanent
 Loss in value of collections through poor stewardship
 Decrease in access to and use of collections
 Copyright causing disputes
 Significant waterlogged wood finds

8.2 Strengths

8.2.1 Archaeological Archives: A Great Resource

Archaeological archives are a resource that can be used for scientific and academic research, local history and school based learning. The collections are the physical evidence of the people who have lived in Wales for nearly quarter of a million years. There is the potential to use archaeological archives as a springboard into the development of ICT skills as well as to develop social and cultural awareness. These collections could be used to enrich life and learning in local communities or by Universities. They are a resource for all, from schools students to professors.

8.2.2 Archaeology Creates Public Interest

The continued interest in archaeology is demonstrated by popular television programmes, participation in voluntary schemes such as the Portable Antiquities Scheme, the continued popularity of archaeology galleries in museums across Wales and the phenomenal interest in the discovery of a Mediaeval ship in Newport. The public appear interested in the whole process of archaeology from the initial investigations throughout the life of the project.

8.2.3 Cooperation Amongst Professionals

All in the sector report high levels of co-operation between professionals. As local museums develop a better understanding of the stewardship requirements of the NMGW and in return NMGW develop closer working links with staff in the regional museums, reports are increasingly favourable about the possibility of cooperation in museums.

8.2.4 Size of the Archaeological Community in Wales

The interconnectivity and close working relationships between archaeological and other bodies in Wales is a strength which can be built upon.

8.2.5 Community and regional base of the WATs

The four WATs are regionally based, close to the communities they serve and are an important element in any strategy.

8.2.6 Raising Standards through Partnerships

The WAG supported pilot partnership scheme *Cyfoeth Cymru Gyfan - Sharing Treasures* has highlighted the increased possibilities of cooperation to improve access

to National treasures. The support received by the museums in terms of additional resources from WAG and additional support from staff from the NMGW has helped raise the overall standards of stewardship in those institutions. The Gathering the Jewels scheme is also an excellent example of partnership across museums, libraries and archives.

8.2.7 Expertise within NMGW

The survey shows that NMGW staff provide considerable support to practitioners operating at all levels in the sector. This advice and support is identified and welcomed throughout Wales.

8.3 Weaknesses

8.3.1 No Coordinated Collecting Strategy for Wales

At present the Curatorial Divisions of the WATs require the deposition of archaeological archives to be agreed prior to the commencement of projects. The results of the survey show that this does not appear to have happened for a significant proportion of archaeological archives destined for local museums. This can be due to a range of factors such as ‘historical’ excavations waiting to be deposited, lack of a repository in certain areas, lack of formal agreement and turnover of staff within museums or even a lack of response from museums. However, deposition remains an afterthought of the archaeological process. Many excavators do not consider rationalising the archaeological archive prior to deposition to be their responsibility. Collections are deposited in museums without a clear strategy for what is appropriate for the collection and the institution. There is no formal and agreed means to identify the status of an archaeological archive i.e. national, regional or local and this contributes to the problem of ‘mismatched collections’.

8.3.2 No Unified Standards

The sector is awash with standards and guidelines, but none of them are effective in improving quality of work. No single standard is agreed by all as defining good practice and as a result none are consistently used. There is little awareness of relevant standards for the stewardship of documentary records.

8.3.3 Fragmentation of Information Base

Many of those operating in the sector are confused about best practice in managing information. This includes problems of deposition, digital records and grey literature.

Confusion exists about the need to deposit copies of records in the NMRW at the RCAHMW. Curators were neither ensuring that records associated with their collections were entered on the database, nor were they using the resources that RCAHMW provides. Whilst there is less confusion amongst most of the excavating units, issues related to the deposition of records, especially in relationship to copyright and ownership arrangements remain unresolved.

The growth of grey literature means that a great deal of valuable information is never published in the conventional way. Refined and edited versions may appear after a lengthy delay in journal articles or in books, but in many cases the original report or paper is the only source. These documents are often difficult to access.

Few organisations had well developed and implemented policies on the management of digital records. There is no standard procedure in operation in Wales.

8.3.4 Inconsistent Monitoring of Deposition Process

Through their role in the planning process the WAT's develop and approve the briefs for all archaeological work arising from planning regulations. A combination of factors including the time delay before deposition, the lack of standards for deposition, lack of resources and lack of co-ordination make it difficult for the Trusts to monitor this process.

8.3.5 A False Distinction Between Excavators and Places of Deposit

From the public perspective an archaeological site has a single story, from discovery or identification of a research question, through to displaying items in a museum. The requirements of the transfer of ownership mean that those working in the sector make an enormous distinction between the process of excavation and the point of deposition and subsequent interpretation of the collection for the public. No National agency has responsibility for an overview of the entire process. The system operates around the needs of the practitioners but does not reflect the interests and concerns of the public.

8.3.6 No Single Statutory Agency

At present there is no agency with a responsibility for archaeology from planning to deposition. Informal networks are positive in many ways but result in no unified approach to issues such as standards, competitive bidding for archaeology and the

management of the transfer of archaeological archives. There is a need for a strategic agency to press for, encourage, and support archaeological provision across Wales.

8.3.7 No Coordinated Management of University Collections

University collections represent valuable archaeological resources which have been created with the use of public money. There is no significant access for the public to these collections, either physically or intellectually. Bad practice demonstrated in Welsh universities may be passed on to new archaeologists, or may diminish the respect for the high standards of research and teaching offered in these establishments.

8.4 Opportunities

8.4.1 A Bridge to the Use of ICT for Learners

Archaeological archives have a wealth of useful and well organised associated information available through the World Wide Web. There is the opportunity for archaeology to act as a bridge to ICT for older people as well as providing linkages from history to science for learners of all ages.

8.4.2 Developing Web-based Access

Considerable amounts of data about archaeological projects are available and many agencies in Wales are developing exciting partnership projects to further enable access to this resource.

8.4.3 Development and Coordination of Collecting Policies

There is an opportunity to consider an all Wales archaeology collecting policy. This strategic decision could be taken in Wales due to the size and generally cooperative nature of the professional group. As it develops there is an opportunity for CyMAL, through the framework of Registration, to develop a unique element for Wales that requires museums to participate in an all Wales collecting policy.

8.4.4 Coordination of Digital Information

There is a general willingness to receive advice on standards for preserving and presenting digital information. The opportunity of the RCAHMW working with ADS results in a Welsh-owned scheme which benefits from the standardisation and guidance developed on a UK wide basis, in line with UK wide initiatives. The development and regular updating of guidance on suitable and stable digital formats

would ensure continued access to information whilst reducing the requirement to create paper copies.

8.4.5 Cadw and Funders Recognising Standards

Although there is no currently agreed standard for the deposition of archaeological archives, Cadw has identified that if the profession in Wales agreed on a standard, or on a framework, then it would be reasonable to expect that all work funded by or supported by Cadw should match this professional level.

Other significant funders would be more likely to require the use of standards if a single all-Wales framework was developed and agreed.

8.4.6 Predicting the Cost of Accepting Collections

Using data generated by this report museum managers can identify the actual cost of accepting archaeological archives. This could inform the decision to collect and may also encourage a more detailed discussion of the nature of the archaeological archive to be deposited. Identification of the cost of storage also helps frame decisions to deposit collections in a national or regional store.

8.4.7 Curatorial Role of the WATs

The WATs each have a Curatorial Division which is supported by Cadw and Unitary Authority funding. These Divisions provide the briefs and approve specifications for the vast majority of planning applications in Wales. A national policy of working practice formulated and agreed by the WATs, museums and local planning authorities, with Cadw and RCAHMW support, would considerably improve the current situation.

8.4.8 Improving Research and Access Through Stewardship

There is a great willingness by museums to make collections available for study. Evidence from England shows that where an archaeological archive is well managed, with good records, high quality storage and no overcrowding, it is researched more heavily than a badly managed collection. The result is usually an increased awareness of the significance of the sites researched. Improvements in stewardship could thus lead to an increased appreciation of the history of Wales across the international archaeological community, and through this means to the wider public. Given the nature of the differing bodies operating in the sector this leads to genuine opportunities for partnerships between educational establishments, business, the

media, charities and organisations run largely by volunteers to develop and strengthen a Welsh identity.

8.4.9 A National Approach to the Transfer of Records

The RCAHMW has produced a policy detailing their willingness to accept and manage original paper and digital archives generated by archaeological work within the National Monuments Record of Wales. In addition RCAHMW will accept copies of the paper and digital archive associated with collections where these are deposited in museums. The promotion of this clear statement of policy could help reduce confusion amongst some curators and excavators. However, further discussions are needed with the WATs and the wider archaeological on the problems of grey literature generated by developer-funded work.

A full copy of the policy is reproduced in Appendix D of this report.

8.5 Threats

8.5.1 Overcrowded Stores Restrict Access

The current overcrowded conditions will not improve unless action is taken. This would result in increasing limitations on access. Whilst good stewardship increases the research and interpretation potential, overcrowding has the opposite effect. This will reduce the role of Welsh archaeology in contributing to the interpretation of our past and will prevent new learners of any age from pursuing their interests.

8.5.2 Difficulties in Predicting the Deposition of Archaeological Archives

The pattern of growth of collection, 'Random growth peaks', makes it hard for museum staff to plan for acquisition. It is hard, or perhaps impossible, for individual curators to identify and respond to trends in excavation. Such trends may be much more apparent if monitored on a Wales wide basis. Such monitoring would provide evidence for policy.

8.5.3 Orphan Collections

Whilst efforts are made by excavators there remains collections of local and regional importance that have no suitable place of deposit. These collections languish in excavator's stores with limited public access. As the permanent retention of archaeological archives is neither the responsibility nor the desire of excavators, at some point these collections must be deposited or disposed of. This will result in either

a significant additional financial responsibility for an organisation with no strong policy commitment to collect such material, or in the loss of the archaeological record. Which option is followed will be decided on geography and funding rather than on the value of collections for research and interpretation. Until a network of bodies prepared to collect across the whole of Wales is established and a national policy for disposal of unwanted collections is developed new orphan collections will continue to be generated.

8.5.4 Sudden Deposition to Non-National Museums

At present the survey identifies that there is a minimum of 514 metres of collections awaiting deposit in non-National museums in Wales. Museums can therefore expect to receive a 22% increase in the total volume of collections. Given that 53% of museums identified that their stores were ‘already over crowded’ or ‘full’ this indicates a significant problem. The additional predicted costs to museums of between £60,000 and £90,000 per year represents a burden that could not be met without a sacrifice of activities in other areas. It is more likely that the response to attempts to deposit all the outstanding collections would be a refusal by many local museums, increased pressure on the NMGW to accept inappropriate collections and the threat of loss through disposal of the archaeological archives.

8.5.5 Temporary Storage Becoming Permanent

Many excavators and excavating units comment that their stores are only acceptable for temporary storage, yet 67% of excavators have archaeological archives in store from excavations that were complete before 1998. There is an urgent need to define temporary storage and to acknowledge where a collection is, in effect, in permanent storage. Unless this is acknowledged standards of stewardship will be allowed to remain well below that acceptable for permanent storage because excavators justify their lower standards behind an unreasonable definition of temporary.

8.5.6 Loss in Value of Collections through Poor Stewardship

The survey indicates that there are significant threats to the condition of the collections, with the potential loss of identification information appearing as the most significant problem. Without this information the collections will lose their value.

8.5.7 Decrease in Access to and Use of Collections

The survey indicates that many curators simply do not understand the archaeological collections that they hold, and the relevant stewardship standards, and are therefore unable to interpret them to the public. Without establishing and maintaining a value

for these collections there will be increasing pressure to neglect and perhaps even dispose of the archaeological archive.

8.5.8 Significant Waterlogged Wood Finds

Where waterlogged wood and other organic material survives on a site it is often found in large amounts. The discovery of significant amounts of waterlogged organics can be unpredictable and it is often the case that sufficient resources have not been planned for their management. Once excavated, waterlogged organic material requires specialist storage, research and conservation. Facilities for this work have high set-up and maintenance costs and this needs to be considered when considering the provision of storage facilities within Wales. Although sites with large amounts of waterlogged wood have been adequately managed so far the potential remains for a large amount of material to be deposited with a museum which is unable to deal with it.

8.5.9 Copyright Causing Disputes

Although at present there is little concern about the process of copyright within the management of archaeological archives, it is not possible to ensure that in a future potentially more litigious society that this situation will remain as it is. It is essential to correctly ascribe copyright now to avoid disputes in the future.

9 Recommendations

The following recommendations represent a package of approaches that we believe will deliver improved access and management of Welsh archaeological archives.

These recommendations have been offered with the intention that they be put forward for consultation with the wider archaeological community. Consultation has been undertaken prior to this stage and the results of this have been included in the development of the recommendations.

We believe that the following principles should underpin any measures selected and these factors have informed the development of the recommendations.

- It is essential to build on the strengths of the sector and wherever possible continue with the pursuit of consensus through cooperation and agreement.
- Building partnerships between all parties involved in the sector including educational establishments, business, the public sector, community groups and trusts will help generate maximum benefits.
- Aim to develop a critical mass of resources both expertise and collections.
- Recognise and acknowledge the desire expressed across Wales for collections to be accessible both nationally and locally, or at least regionally.
- Whenever possible avoid the imposition of uniform restrictive solutions and allow organisations to have different approaches where these are necessary due to restrictions or historical patterns.
- Avoid placing an unreasonable burden on any party.
- Ensure that there is a level playing field where tendering is involved.
- Promote good standards by discouraging bad practice as well as promoting good practice.
- Reduce amount of paper copies of documents where a stable digital format is available.
- Collections should be linked by a continuous documentary record that includes the paper, digital and photographic collections as well as finds and samples.
- Selection, retention and the deployment of resources should be informed by scientific and research considerations and must not be shaped by fashion.

The first pair of recommendations represent an ‘either / or’ decision, all of the others can deliver benefits on a stand alone basis but are recommended as a complete package for the most effective management of archaeological archives. Although there are several recommendations, the consultants consider that the solutions are not mutually exclusive.

Recommendation 1a	Create a national store, or
Recommendation 1b	Create regional stores as centres of excellence
Recommendation 2	Create a database of Welsh archaeological collections
Recommendation 3	Establish a national panel for archaeology
Recommendation 4	CyMAL to develop a remit for archaeology
Recommendation 5	Encourage and develop a nationally framed collecting policy through the Museum Registration Scheme
Recommendation 6	Draw up guidelines for the deposition of collections and supporting information
Recommendation 7	Review the management of the information base
Recommendation 8	Require the management of archaeological archives by universities
Recommendation 9	Additional training

9.1 Storage of Archaeological Archives

Archaeological archives that are not on display or in handling collections are primarily a resource for researchers. These are, in essence, scientific collections that can be used to study aspects of our shared past. Researchers need not be academics, but they will tend to have some pre-existing knowledge about the material. There is therefore a case that can be made that the study of these materials would be facilitated by storing the collections in a central point. Whilst researchers may have to travel they would at least be assured of being able to cross-reference collections at the same point and would be sure of finding items that they wished to study. This makes a case for centralised stores.

The centralisation of collections will make storage more cost efficient as the ratio of storage to study space can be increased. This should reduce the cost per metre of holding collections, allowing more of the cost of maintaining the collection to be

directed to the active work of conservation and providing specialists to interpret and manage the material, leading to a more direct public benefit.

The options described consider either a single store for Wales, matching the APPAG recommendation of a single ‘regional’ store for Wales, or developing several centres across Wales as regional centres of excellence, matching more closely the concept of ‘museum hubs’ promoted by Resource. The researchers do not recommend the establishment of new institutions and envisage the additional provision being associated with existing institutions supported by additional funding.

In both cases the recommendation remains that museums local to excavations should continue to display finds from the site and we recommend that ‘fast track’ loan arrangements be developed for this purpose. However, local and regional museums that were not to be charged with holding archaeological archives could relinquish this responsibility for future acquisitions, or even pass on archaeological archives that they currently hold. This would free the museums to commit more of their space to other aspects of their collecting priorities. Issues of ownership, copyright and acknowledgment of work would need to be considered in detail and as a starting point the work embedded in the LAARC model should be considered.

Recommendation 1a & 1b are based on a partnership approach with local museums providing the access and interpretation while the central stores provide the stewardship and specialist research roles. A decision on the preferred option will effect the implementation of several subsequent recommendations.

9.1.1 Recommendation 1a:

Create a National Store

The simplest solution is to create a single national store attached to the National Museums & Galleries of Wales. This would have to be in a location with good access to road and rail networks, and be at or near to Cardiff as this is where the greatest concentration of specialist museum-based archaeological staff are located.

This solution may be politically unpalatable but has the basis in supporting research. It would only be acceptable if good working arrangements can be made for the local display of collections and fast track loan agreements could be agreed with museums

across Wales and if additional resources were provided to NMGW for this additional responsibility.

Advantages

- Economy of scale for storage, employment and running costs.
- Critical mass of resources, both people and collections.
- Single organisation is easier for excavating units to liaise with making a single standard for deposition inevitable.
- The central body could act as monitor and identify any problems with the quality of the archaeological archives, referring these to the Trusts if necessary.
- The NMGW has a track record in the best quality storage conditions with collections managed to accepted standards.
- Improve access since collections type and location known about, staff could work on digitisation of data, pictures etc. with time and resources.
- Improve research with access to collections at a single point allowing for more interpretation and consequently higher profile of sites in Wales.
- Good public transport links to Cardiff: units and researchers from England will also need ready access for deposition and access.
- Strengthens ideas of Welsh Research Agenda, one place for research.
- Would allow selection / retention on a scientific basis, not based on a lack of space response.
- Specialist staff available for all periods of archaeology.

Disadvantages

- Time and ease of access from north and west Wales.
- Cardiff is a highly served section of Wales and this will not move resources out of the capital.
- Local perception of collections being 'removed' to Cardiff and lost to a community may cause resentment.
- Potential for NMGW to attract many 'low level' enquiries that involve highly trained specialists dealing with enquiries that could be better supported by a curator with a relationship with the local community.
- May impede researchers from developing specialist knowledge of collections based on a geographical rather than archaeological period.
- Less local access to research collections.

9.1.2 Recommendation 1b

Create Regional Stores as Centres of Excellence

An alternative to a single national solution would be the development of regional centres of excellence. These proposals would involve a number of museums with existing provision for archaeology being supported to develop additional storage provision and access points for researchers. It is unlikely that such organisations would employ more than one or two archaeologists so these staff would require good general knowledge of their locality. Staff could not be expected to develop expertise across all archaeological periods although staff based at other regional stores may be expected to have complementary skills. Staff could field many enquiries and refer to expertise in the NMGW only where necessary. This solution maintains the research potential of the first solution and retains some of the opportunity for more dense and cost effective storage. It is possible to envisage the NMGW working in partnership with the regional stores.

Advantages

- Politically more acceptable across Wales.
- Will be viewed as more accessible by museums.
- Can be based around larger regional institutions.
- Could take advantage of lower overhead costs outside of Cardiff.
- Much improved storage conditions to accepted standards in several museums.
- Will lead to improved access since collections type and location known about.
- Potential alliance in partnership programmes.

Disadvantages

- Would require agreement on collection policy (recommendation 5) before being fully effective.
- Could create the sense of a multi-tiered local museum system.
- Dilution of collections as a scientific resource.
- Inevitable dilution of specialists in relation to collections.
- Higher cost as it would require specialists and resources in each location and would have a less favourable ratio of storage area to access point.
- Specialist facilities for material such as waterlogged wood would not be cost effective in several locations. A more cost-effective option may be for one store to lead with specialised facilities such as those required for waterlogged wood.

- Collection policy would need to guide units to correct region.
- Require more liaison points for excavating units (although would represent a considerable improvement on current situation).

9.2 Recommendation 2

Create a Database of Welsh Archaeological Collections

Access to collections depends on both the organisation of the physical space and the level of knowledge about where a particular collection is held. This recommendation to create a database would require the collation of information about the location of existing collections and the ongoing addition of data as it is created and altered.

Increased knowledge about collections, particularly in a format searchable over the web, will increase access. A detailed survey of archaeological collections held by organisations throughout Wales would be extremely productive for several reasons. Once the database of archaeological collections is established it could be publicised using the internet and linked to existing databases such as NMRW and the SMRs, allowing members of the public to search for information on particular sites. This will improve access to information about collections and by providing details of the location of the collection will also increase access to the collections themselves.

Collections that, due to historical reasons, have been split between several organisations can be identified, which will aid decisions as to whether they should be reunited as a single archaeological archive.

The database would also help to identify areas of Wales that have problems due to a crossover of collecting policy, or areas that are not covered by any collecting museum.

9.3 Recommendation 3

Establish a National Panel for Archaeology

There is an urgent need for a national, unified approach to archaeological collections. No one body in Wales has a mandate for the entire process and the necessary expertise is spread amongst many organisations. This has had the positive impact of encouraging partnership working. However this has been developed through informal networks and as such there has been no unified approach to issues such as standards,

competitive bidding for archaeology and the management of the transfer of archaeological archives.

A panel made up of representatives from all of the key bodies is a central recommendation of this report. In order for the panel to have sufficient influence they should have access to supportive measure such as grants and to enforcement procedures, as well as credibility in the sector. It is therefore recommended that the panel operates in conjunction with CyMAL acting, in effect, as an advisory panel. The exact nature of the relationship between the panel and CyMAL is not discussed as the consultants believe that this is an issue that the future director and staff of CyMAL would wish to influence. However, a formal relationship is recommended with the panel acting in an advisory role and CyMAL exercising executive powers.

9.3.1 Composition of the Panel

The panel should have representatives from each of the key stakeholders in Welsh archaeology. The panel should include members who are practising archaeologists, and those with practical expertise in stewardship of and access to collections.

9.3.2 Areas of Concern

The following list identifies areas that the panel could consider in an advisory capacity to CyMAL. Each point is discussed briefly below.

1. Place of deposit of new archaeological archives
2. Designation of national / regional / local status
3. Collecting policy
4. Areas where collecting is underdeveloped
5. Standards
6. Practice for digital information
7. Orphan collections and collections with special needs
8. Selection, retention and disposal

9.3.2.1 Place of Deposit

At present, in most cases, excavators have identified a potential place of deposit and identified the landowner who holds the legal title to ownership before conducting excavations, although this is not a consistent approach. The survey has shown that there is a range of excavators working in Wales and many have not made arrangement for deposit prior to excavation or even during the preparation of the archaeological archive. In the questionnaire responses many excavators identify a

museum as a place of deposit with a question mark, noting that they have not yet contacted the museum. In several cases no place of deposit has been identified for excavated collections. The survey also revealed the problem of excavators attempting to deposit collections in museums that are unable to offer even the minimum standards. Until such time as all registered museums can offer storage to national standards it would be beneficial to be able to direct excavators to suitable repositories. If this recommendation is implemented, in conjunction with others in the report, the consultants believe that a short to medium term objective should be that excavations do not proceed in Wales without an agreed place of deposit. This practice would be underpinned by the development of a national collecting policy, (Recommendation 5) which would also reinforce the point that the whole of the archaeological archive has to be deposited with a museum.

It is recommended that all excavators register with the panel prior to excavation, notifying where they have planned to deposit collections and seeking approval from CyMAL advised by the panel. This need involve no more than an email or joint access to a central database and it is anticipated that it would only be in exceptional cases where a place of deposit would be challenged.

9.3.2.2 Designation of National / Regional / Local Status

The designation of the status of a collection is important both where more than one party wishes to claim an archaeological archive and where no party does. In abstract terms no individuals dispute the necessity of nationally important collections being part of a national collection but many admitted that in their own area they would still resent collections being collected by NMGW. It is advised that the process of designating items as nationally important is agreed by the panel as a representative body in order to improve satisfaction when such decisions are taken. This process should be limited to that which is absolutely necessary and significant access to parts or all of nationally important collections close to point of excavation should be facilitated.

At the other end of the spectrum many items are excavated where no party wishes to hold the collection. In the past considerable pressure has been applied by excavators to the NMGW to collect these items to avoid them being lost. The panel should be able to advise where a collection is only of local importance and, should no local place of deposit be identified, the NMGW could be supported in their refusal to collect the material.

As the experience of designating collections as local, regional or national status develops a clear set of criteria will begin to emerge. There may be the opportunity of extending these definitions to define existing collections to help with the targeting of resources for stewardship and access initiatives.

9.3.2.3 Collecting Policy

The consultants believe that a nationally framed collecting policy should be developed and implemented through the Museum Registration Scheme. The panel should be consulted on the detail of such a policy.

9.3.2.4 Areas Where Collections are Underdeveloped

Excavators report areas where no organisation is collecting archaeology, but this information is not currently being collected nor considered with a National view. The panel should identify areas where no organisation is actively collecting. This may be an intermediate measure if recommendation 1 is implemented in either form, or would be on-going if recommendation 1 was not implemented. The panel should take a view on this process and advise CyMAL where they believe additional development support would be advisable.

9.3.2.5 Standards

The panel should advise on the implementation of a single set of standards for the management of archaeological archives. This should be based on existing work where possible but develop a core framework for all parties that are operating through the aegis of the panel.

9.3.2.6 Orphan Collections and Collections with Special Needs

At present some collections have no acceptable home. The excavator can find no place of deposit and store them without any real access in conditions which are not suitable for preservation. In some cases these collections can be decades old. The cost of holding these un-wanted collections is significant and a drain on other activities. The panel could advise on potential places of deposit for such collections and if necessary consider advising on re burial of unwanted material.

In addition the panel should advise on the management of collections with specific needs, such as waterlogged wood. The panel could provide expertise in identifying

sites with the potential for the survival of waterlogged material and recommend specific provisions for such material to be included in the archaeological brief.

9.3.2.7 Selection, Retention and Disposal

Museums are often presented with complete archaeological archives which include soil and charcoal samples, ceramic fragments from mediaeval and post mediaeval layers, roof tiles, iron slag and plaster. The survey identified that curators often question the value of keeping this type of material. There are valid scientific and research reasons for collecting samples of such material, but there is also the possibility of tightly defining what should be retained and passed to museums. Given that museums will strive to preserve this collection in perpetuity at the public's expense this investment must be worthwhile. Excavators should selectively deposit such material. Few museum staff have the skills, time and familiarity with the site to make an informed selection. This could be carried out far more easily by the finds specialists. The panel should help develop guidance on a procedure for selection of material for deposition.

There remains a problem of collections and material that have been excavated but have never been deposited. At some point, when a collection has been held for years, or even decades, by the excavator and no suitable place of deposit has been found, the excavators must consider disposal by re-burial. The panel should review such decisions, ensure that all reasonable places of deposit have been considered, that CyMAL have been advised of any underlying issues and where necessary approve the re burial of collections.

9.3.2.8 Other Issues

There are other issues which could be considered by the advisory panel.

- Review the concept of charging excavators to deposit archaeological archives.
- Providing feedback to excavators if excavated collections arrive in inconsistent or unsuitable conditions.
- Providing advice on relevant legislation to CyMAL.
- Where relevant discuss the application of the Treasure Act (1996).
- Liaise with the Archaeological Archives Forum where appropriate.

9.4 Recommendation 4

CyMAL to Develop a Remit for Archaeology

At present there is no agency with a responsibility for archaeology from inception through excavation to deposition. Instead the distinction between excavation and deposition stems from the division of areas of responsibility of national agencies. This division mitigates against the interpretation of a site for the public from discovery to display and helps feed the lack of communication between parties. The distinction between archaeological material being excavated and deposited remains significant in defining the legal status of collections. However it is a distinction with little relevance to the public. The consultants believe that there is a need for a strategic agency to press for, encourage and support archaeological provision across Wales and recommend that CyMAL's remit is extended to include archaeology at all stages. This could include:

1. Grants for conservation and access to collections.
2. Grants for museums to raise standards.
3. The development of a nationally framed collecting policy through registration, (recommendation 5).
4. Identification of areas of work for the advisory panel.
5. Grants to develop collecting provision in under supported areas.

Grants could be considered for activities such as:

- Conserving items to a displayable standard before the research on the site is completed. This would allow the item to be immediately displayed in the receiving museum, before the site archive has been transferred.
- Interpretation of active sites linking up to museum with displays of small finds as they are excavated.
- Equipment such as digital projectors or computer work stations to allow specialists to interpret collections via the information available on the web about archaeological sites.

CyMAL as a strategic agency could investigate and review the commitments of relevant organisations in any area that does not collect. In many cases this would involve discussions with relevant departments of Local Authorities to encourage the installation of provision. CyMAL should be able to support new capacity either

through supported posts, similar to CMW's assisted curator scheme, or through infrastructure support.

9.5 Recommendation 5

Encourage and Develop a Nationally Framed Collecting Policy through the Museum Registration Scheme

The consultants believe that there is a need for a unified Welsh strategy for collecting policies. The Museum Registration Scheme is a mechanism by which CMW has been able to coordinate and review collecting policies for all registered museums in Wales. CyMAL should strengthen and enforce the elements of the Registration scheme to deliver a single national collecting policy delivered through coordinated policies in each museum.

9.6 Recommendation 6

Draw up Guidelines for the Deposition of Collections and Supporting Information

There is a clear need to devise a national policy of working practice which would detail a single standard procedure for the deposition of archaeological archives into Welsh museums and the NMRW as appropriate. This policy work should be devised by a national WAG-funded body and agreed upon after consultation with those working in the field. This policy would be devised as a framework and would not preclude organisations from introducing specific additional requirements where necessary.

Guidelines to include:

- Requirements for box and packaging types and quality.
- Agreement of a strategy for post excavation investigation: such as x-radiography.
- Levels of conservation.
- Agreement on a labelling and marking strategy for small finds.
- Minimum documentation requirement of a site report and a complete index of other information, location and format.
- Provision of a copy of whole or part of documentary, digital and photographic archive, as agreed, for NMRW.
- Pre-transfer selection.
- Ownership and transfer of title.

- Collection to be transferred as a whole.
- Copyright agreements for paper and digital records.
- Time limit between excavation and deposition.

9.7 Recommendation 7

Review the Management of the Information Base

The multitude of organisations with responsibility for the management of information has led to a fragmentation of the resource. There is a need for a review of the management of information, including documentary, digital and photographic archives. This review must be primarily user focussed, rather than professionally focussed as users are not interested in structures. This review should encompass grey literature, copyright and ownership and practice for digital information.

9.7.1 Grey Literature

There is the need to commission further research into how the information currently contained in 'Grey literature' can be made more widely accessible.

9.7.2 Copyright and Ownership

Although this is not a current headline concern for practitioners there is the potential for the existing arrangements to lead to conflict in the future. It is recommended that Welsh funding bodies support existing research of the Archaeological Archives Forum in the areas of copyright and ownership. Support should be offered with the proviso that such research efforts have sufficient Welsh representation on the relevant steering groups and the research considers any special requirements of the Welsh funding framework for archaeology.

9.7.3 Practice for Digital Information

Future developments in the provision of digital access should be led by the needs and concerns of users rather than the convenience and historical traditions of information providers. The need to simplify access should be considered when developing any further web interfaces. The nature and number of potential users and their specific needs should be identified before any further developments are undertaken. This should ensure that information in a useful and useable format is presented in a cost effective manner. There is a need in Wales, as in the rest of the UK, for leadership to ensure consistency in service delivery.

Whilst the RCAHMW has the ability, and remit, to maintain digital data there is a great deal that is not currently copied to RCAHMW. The management of digital data requires both useable access provision and the maintenance of that data. All parties need advice on preservation of digital data, perhaps through training or publications. Closer working for the deposition of material with RCAHMW should be encouraged.

9.8 Recommendation 8

Require the Management of Archaeological Archives by Universities

Universities with archaeological collections should be required to match minimum standards for the management of their archaeological archives, based on an existing standards framework such as Museum Registration. Standards should include the requirement to:

- Identify a person responsible for managing the collections and develop a collections management plan.
- Define the status of collections held in the university stating clearly whether the collections are permanent or temporary.
- Maintain a central accessible register of all collections held in the institution noting the content of the collections, its ownership, its planned place of deposit, and a timescale for deposition.
- Hold formal agreements with the final place of deposit for all temporary collections.
- Improve access to collections by considering University Collection Open Door events.

9.9 Recommendation 9

Additional Training

There are several minor areas of concern for those operating in the sector that could be addressed by training and information support from specialists. Training or guidance in the following areas should be considered.

- The insurance valuation of archaeological material for accessioning collections according to standard museums procedures.
- Information on an archaeological who's who in Wales.
- An ability to tap into a network of specialists more easily.
- Integration with museum standard formats for the documentation of archaeology.

- Interpreting archaeological collections to the public.
- Working with existing resources such as RCAHMW, Sites and Monuments Records, CARN and ADS.
- Packaging archaeological collections.
- Basic finds training for excavators to match the expectations of places of deposit.

Appendix A Definitions

Archaeological archive

All material from archaeological excavations, evaluations, site assessments and formal field walking projects from Wales.

This includes all artefacts, human remains, environmental evidence e.g. bones, soil samples, paper records e.g. plans, notes and record sheets, photographic materials, digital records and any post excavation records in any format e.g. specialist reports, conservation reports, archive reports and publications.

Where a collection is essentially Welsh, but which contains a small amount of non Welsh material this should be counted in the survey. If a collection has a Welsh focus but is split over a borders area, such as Offa's Dyke or the Monmouth area then it is in the survey.

This specifically excludes:

Non Welsh material such as ethnographic collections or Egyptology, single finds e.g. portable antiquities, non portable archaeology such as monuments, historic buildings, crosses, standing stones or sites and industrial collections

Permanent holding collections

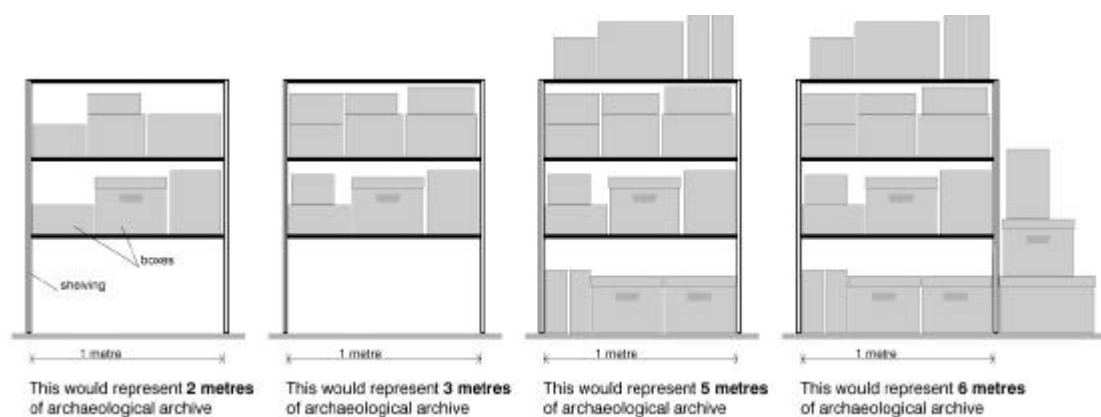
Archaeological archives kept in an organisation with a commitment to keep the collection on a permanent basis. This would apply to museums and may also apply to study collections, University research collections, or private collections.

Temporary holding collections

Archaeological archives kept for reasons such as study research or conservation which are not intended to become a permanent part of the institutions collection. This would apply to archaeological units, contractors and most excavators.

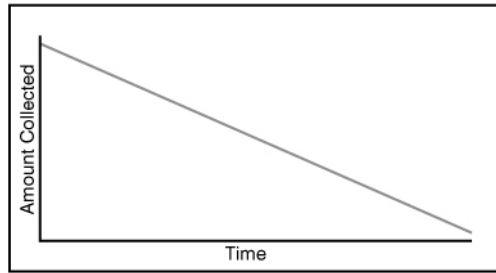
Larger Collection

Over 10 meters of shelving as estimated using the examples below.

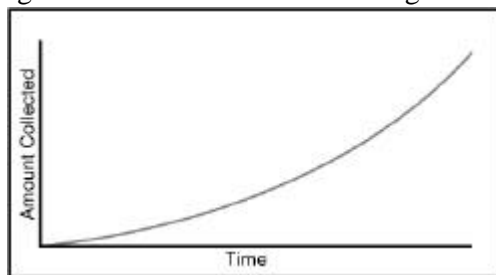


Collection Growth

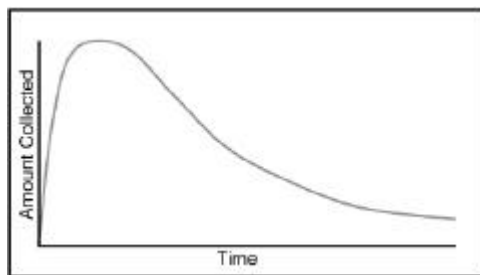
A Specific Subject: The collection represents a specific subject or theme as it becomes complete growth begins to decline



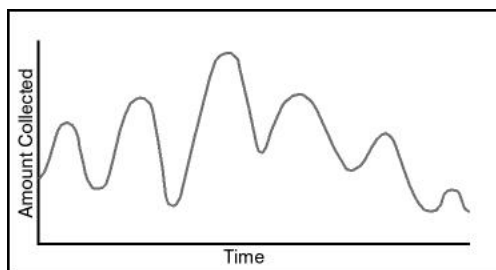
B Systematic Growth: The collections will grow systematically at a steady growth rate depending on levels of research / collecting / excavation.



C Associated with Place or Event: The collections must be associated with a specific place or event. There are a finite number of artefacts which match the criteria so rate of growth will decline over time.



D Random Growth Peaks: The collection will grow in fits and starts when the artefacts are offered or discovered. Specific events cause peaks in collecting but they are hard to predict. Normally restrained by physical capacity to accept more material.



Appendix B

Consultation

Mary Aris	Oriel Ynys Môn
Jon Berry	Cadw: Welsh Historic Monuments
Jane Bray	Monmouth Archaeology
Eva Bredsdorff	Powysland Museum Service
Tim Bridges	City of Worcester
Jenny Britnell	Clwyd Powys Archaeological Trust
Les Good	Bristol Museum
Alun Gruffydd	Oriel Ynys Môn
Chris Caple	Durham University
Ray Caple	Independent Archaeologist
Bernice Cardy	Swansea Museum and Art Gallery
Steve Clarke	Monmouth Archaeology
Lyn Einman	Cadw: Welsh Historic Monuments
Gareth Edwards	RCAHMW
Sarah Finch	Caldicot Castle
Mike Hamilton	University of Wales College Newport
Nigel Jones	Clwyd Powys Archaeological Trust
Mark Lewis	Roman Legionary Museum, Caerleon
Christine Longworth	Liverpool Museum
Frank Olding	Blaenau Gwent County Borough Council
Chris Martin	Clwyd Powys Archaeological Trust
Kevin Mason	Welsh Representative MA
Ken Murphy	ACADAT
Rachael Rodgers	Abergavenny Castle and Museum
Hedley Swain	Museum of London
Felicity Taylor	Monmouth Archaeology
Phil Watson	Birmingham Museums & Art Gallery
Chris Wilson	Cynon Valley Museum
Mike Yates	Cadw: Welsh Historic Monuments

Appendix C Respondents

The following organisations and individuals responded to the questionnaire

Organisation	Respondent
Abergavenny Museum	Rachael Rodgers
Abertillery Museum	Don Bearcroft
AC Archaeology	Moira Laidlaw
Amgueddfa Pontypool Museum	Deborah Wildgust
Archaeolog Cambria Archaeology	Ken Murphy
Archaeological Investigations Ltd	Andy Boucher
Bangor Museum and Art Gallery	Pat West
Bangor University	Dr David Jenkins
Bangor University	Dr John Llewellyn Williams
Bangor University	Nancy Edwards
Bournemouth University	Tim Darvill
Brecknock Museum	Nina Helly-Hutchinson
Brecon Beacons National Park	Peter Dorling
Bristol and Region Archaeology Services	Andy King
Cadw: Welsh Historic Monuments	Rick Turner
Caerphilly County Borough Council	Chris Morgan
Caldicot Castle	Sarah Finch
Cambrian Archaeological Projects	Kevin Blockley
CARAD	Rachel Palmer
Cardiff Castle	Matthew Williams
Carmarthenshire County Museum	Gavin Evans
Ceredigion Museum and Gallery	Michael Freeman
CKC Archaeology	Christopher K Currie
Clwyd-Powys Archaeological Trust	Jenny Britnell
Conwy County Borough Museum Service	Ann Williams
Cowbridge and District Museum	D Keith Jones
Cyfartha Castle Museum and Art Gallery	Scott Reid
Cynon Valley Museum and Art Gallery	Chris Wilson
Denbigh Museum & Gallery	Rose McMahon
Durham University	Chris Caple
Durham University	Ian Bailiff
Erddig	Jeremy Cragg
Exeter University	Dr Robert Higham
Flintshire Museums Service	Emma Chaplin
Foundations Archaeology	Tracy Michaels
Geoquest Associates	Prof M Noel
Gifford and Partners	Diane Backhouse
Glamorgan-Gwent Archaeological Trust Ltd	Martin Locock
Gwynedd Archaeological Trust	Andrew Davidson
HISAR, Cardiff University	Alan Lane
HISAR, Cardiff University	Peter Webster
Independent Archaeologist	Alan Probert
Independent Archaeologist	Andrew David
Independent Archaeologist	Frances Lynch
Independent Archaeologist	Geoff Mein

Independent Archaeologist	Graham Makepeace
Independent Archaeologist	Margaret Griffith
Independent Archaeologist	Martin Tuck
Independent Archaeologist	Nigel R J Neil
Independent Archaeologist	Pat Frost
Independent Archaeologist	Ray Caple
Independent Archaeologist	Simon Timberlake
Independent Archaeologist	Steve Clarke
John van Laun Associates	John van Laun
Judge's Lodging	Gabrielle Rivers
Lancaster University Archaeology Service	Vix Hughes
Llandudno Museum (The Chardon Trust)	Ann Williams
Llanidloes Museum	Eva Bredsdorff
Manchester University	Nick Higham
Marches Archaeology	Richard Stone
Monmouth Archaeological Society	Steve Clarke
Monmouth Castle and Regimental Museum	Eric Old
Monmouth Museums Service	Andrew Helme
Museum of London Archaeology Service	Nathalie Cohen
Nantgarw China Works Museum	Chris Wilson
National Museums and Galleries of Wales	Elizabeth Walker
Neath Museum	Rob Merrill
Newport Museum and Art Gallery	Victoria Newton-Davies
Northamptonshire Archaeology	Tora Hylton
Old Bell	Dr Ann Welton
Oriel Ynys Mon	Ian Jones
Oxford Archaeological Unit	Nicola Scott
Oxford Brookes University	Dr Nicholas Barton
Pontypridd Museum	Brian Davies
Porth-y-Waen Study Centre	Margaret Worthington
Powysland Museum	Eva Bredsdorff
Pre-Construct Archaeology	Frances Corin
Radnorshire Museum	Rachel Sholl
Roman Legionary Museum	Elizabeth Walker
South Wales Borderers Museum	Major Martin Everett
Swansea Museum	Bernice Cardy
Tenby Museum and Art Gallery	Mark Lewis
The Kenfig Society	Dr Terry Robbins
Trinity College, Carmarthen	Trevor Kirk
University of Bradford	Alex Gibson
University of Oxford	Dr Peter Northover
University of Wales Aberystwyth	Dr Jeff Davies
University of Wales College Newport	Dr Josh Pollard
University of Wales College Newport	Dr Ray Howell
University of Wales College Newport	Neil Phillips
University of Wales College Newport	Rick Peterson
University of Wales Lampeter	Dr Barry Burnham
University of Wales Lampeter	Dr John Crowther
University of York	Dr Lawrence Butler
Wessex Archaeology	Lorraine Mephram
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Appendix D RCAHMW Policy



Royal Commission on the Ancient & Historical Monuments of Wales . Comisiwn Brenhinol Henebion Cymru

including the National Monuments Record of Wales

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Archaeological Archives Policy

The Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) aims to collect and curate archaeological records and archives (paper, photographic and electronic) within the terms of the *National Monuments Record of Wales Collecting Policy*. NMRW is the national repository for records of the archaeological, architectural and historic environment in Wales.

In effect this means that all archaeological archives, without associated finds, created by any organisations or individuals, are accepted by RCAHMW for the NMRW. Archaeological archives with associated finds would normally be expected to remain together and be held in an appropriate museum but RCAHMW would encourage a copy of the core paper/electronic archive to be deposited in the NMRW along with details of the museum holding the original. In the event that a museum accepting or holding archaeological finds is unable to accept the paper and/or electronic associated records these may be deposited in the NMRW.

Potential depositors are encouraged to contact the NMRW Archivist at an early stage to discuss arrangements.

Hilary Malaws

Head of Information Management

January 2003

Appendix E – Bibliography

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