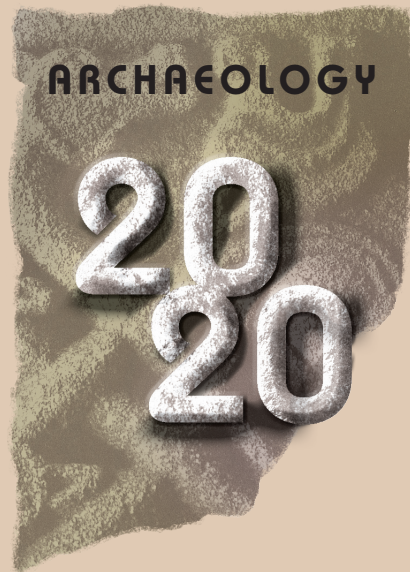


REPOSITIONING IRISH ARCHAEOLOGY  
IN THE  
KNOWLEDGE SOCIETY

A realistically achievable perspective



REPOSITIONING IRISH ARCHAEOLOGY  
IN THE  
KNOWLEDGE SOCIETY

A realistically achievable perspective



AN  
CHOMHAIRLE  
ÓIDHREACHTA



THE  
HERITAGE  
COUNCIL

First published 2006  
by University College Dublin

Arranged for publication by The Heritage Council  
© UCD Dublin

All rights reserved. No part of this publication may be reproduced, or stored in a retrieval system or transmitted in any form or by any means, electronic, electrostatic, magnetic tape, mechanical, photocopying, recording or otherwise, without prior permission in writing from the authors.

The views and opinions expressed in this publication belong to the authors alone.

Designed and Produced by  
B. Magee Design

Editor and Publishing Consultant: Roberta Reeners

ISBN 1 905254 10 5

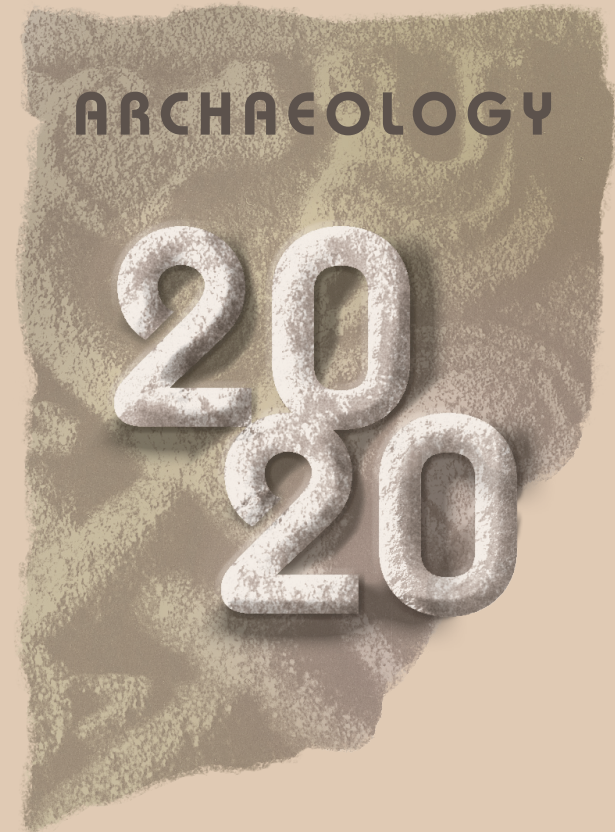
Title: Archaeology 2020. Repositioning Irish Archaeology in the Knowledge Society

Copies of this report can be obtained from:

· The UCD School of Archaeology  
[www.ucd.ie/archaeology](http://www.ucd.ie/archaeology)

· The Institute of Archaeologists of Ireland  
[www.instituteofarchaeologistsofireland.ie](http://www.instituteofarchaeologistsofireland.ie)

Copies of this report can also be downloaded from the websites.



# CONTENTS

List of Illustrations	4
<b>Foreword</b>	<b>7</b>
<b>Executive Summary</b>	<b>11</b>
<b>1. Introduction</b>	<b>14</b>
1.1 Context and Rationale for the Foresight Study	14
1.2 Profile of Irish Archaeology	15
<b>2. Archaeology in Transition</b>	<b>18</b>
2.1 Drivers of Change	18
2.2 Issues Affecting Irish Archaeology Today	22
2.3 Facing the Challenges	27
2.4 From Information Generation to Knowledge Creation	34
<b>3. Initiatives to Reposition Archaeology in the Knowledge Society</b>	<b>38</b>
3.1 Overarching Enabling Measures	38
3.2 Important Strategic Support Initiatives	47
<b>4. Conclusions</b>	<b>57</b>
<b>References</b>	<b>59</b>
<b>Appendices</b>	<b>61</b>
1. Participants in the Foresight Consultative Forum	61
2. Submissions	63

## LIST OF ILLUSTRATIONS

The pattern of archaeological excavation and publication of excavation reports 1992-2004 [after J. O’Sullivan 2003, with additions]	15
The age profile of the archaeological profession [CHL Consulting Ltd]	16
The percentage of archaeologists working in different sectors of the profession [CHL Consulting Ltd]	17
The changing Irish landscape: Carrickmacross, Co. Monaghan, and the N2 bypass [Studio Lab]	19
Geophysical Survey at Kilbeggan, Co. Westmeath: the recovery of a lost Cistercian abbey [GeoArc Ltd]	21
Aerial photograph of test trenching on the M7/M8 [Narrowcast]	23
Aerial photograph of the medieval moated site at Kilaraght, Co. Sligo [Photographic Section, Department of the Environment, Heritage and Local Government]	24
Aerial photograph of Dunluce Castle, Co. Antrim [Environment and Heritage Service, Department of the Environment, Northern Ireland]	24
Aerial photograph of enclosure ditches at Clonfad, Co. Westmeath, on the route of the N6 dual carriageway [Valerie J. Keeley Ltd]	25
Annotated aerial photograph of an early medieval complex at Raystown, Co. Meath, on the route of the N2 Finglas-Ashbourne scheme [Studio Lab/RDS Ltd]	27
Excavation in progress at Hughes’-Lot East, Co. Tipperary, on the route of the N8 Cashel bypass [Richard O’Brien, Tramore House Regional Design Office]	29
Aerial photograph of Bronze Age settlement at Corrstown, Co. Antrim [ACS Ltd]	31

Aerial photograph of Neolithic houses at Monanny, Co. Monaghan, on the route of the N2 Carrickmacross bypass [Studio Lab/IAC Ltd]	33
Bronze Age wooden musical pipes from Charlesland, Co. Wicklow [Margaret Gowen and Co. Ltd]	37
A conservator lifting a Bronze Age burial vessel, Drumsallagh, Co. Meath, on the route of the M3 [Mary Deevy, Meath County Council National Roads Design Office]	39
Excavation of a prehistoric circular enclosure at Barnageeragh, Co. Dublin [ADS Ltd]	41
Aerial photograph of Carns environs, Co. Roscommon, with relict medieval field boundaries and settlement superimposed [BKS Ltd/Discovery Programme]	44
Excavation of 17th and 18th century structures at Smithfield, Dublin [Margaret Gowen and Co. Ltd]	46
Animal bone from midden deposits at Coolure Demesne crannóg, Co. Westmeath [UCD School of Archaeology]	48
Photograph of Cairn S Neolithic passage tomb, Loughcrew, Co. Meath [UCD School of Archaeology]	51
Early Bronze Age burial at Harlockstown, Co. Meath, on the route of the N2 [CRDS Ltd]	56
The view looking eastward from the entrance to Benagh Promontory Fort, Dingle Peninsula, Co. Kerry [Aegis Archaeology Ltd]	58





What is the status of Irish archaeology today?

What future perspective could be achieved?

These strategic questions are addressed by the Foresight Study.

## ARCHAEOLOGY IN IRELAND TODAY

During the past century, the aims of archaeology have diversified very significantly. Going well beyond its original focus of working out a chronology for prehistory, modern archaeology is now concerned with the study of material culture in its broadest sense. Hence it is through things — objects, sites and monuments — that archaeology provides us with an understanding of societies in the past. This material evidence makes archaeology a crucially important medium for understanding Ireland's cultural heritage and is itself a physical expression of that heritage.

A century ago, there was only a handful of professional archaeologists in Ireland, most of them based in museums and universities. The public sector was strengthened by the National Monuments Act (1930) in what was then the Irish Free State, with similar provisions in Northern Ireland. The expansion and growing professionalisation of archaeology was facilitated by the appointment of a new generation of professors in Dublin (1943), Galway (1945) and Cork (1947), and the creation of a lectureship in archaeology at Queen's University Belfast (1948). The small increase in the number of full-time archaeologists from the 1950s to the 1970s occurred mainly within the public services and universities.

Private-sector archaeology experienced a rapid growth in the 1980s. This was in response to the need for pre-construction assessment and excavation of archaeological features impacted on by infrastructural and other developments. The compilation of a preliminary, desktop national inventory of archaeological sites and monuments under the aegis of the Archaeological Survey of Ireland through the Sites and Monuments Record (which is now known in its statutory form as



the Record of Monuments and Places) was a key development. It is the primary source used in the planning process to assess the impact of development on archaeology. Since the early 1990s, private-sector archaeology has mushroomed, mirroring the growth in economic activity. At the same time, State and university archaeology have grown slowly and intermittently. The overwhelming majority of archaeologists are now engaged in the private sector. A generation ago, no more than a dozen archaeological excavations were conducted per annum. Now, in excess of 2,000 licences are issued each year.

The employment opportunities for archaeology graduates and business opportunities for archaeological consultancies have been considerable during the past 20 years. However, the pressure to mitigate the impact of development and to deal with the recovery of archaeological material in the ground has overwhelmed the capacity of individuals and companies to publish the results. Archaeology is now predominantly a service industry, and many developers have limited responsibility or interest in ensuring that archaeologists engaged in development-led excavation have the necessary time and financial support to publish excavation reports. Only a very small proportion of excavations conducted by the archaeological profession since 1990 have been comprehensively published. Yet it is this dissemination of the results of archaeological work which must be seen as the ultimate economic and social value of investment in archaeology.

In summary, Irish archaeology has been changed fundamentally as a result of the exponential growth in development-led activity since the early 1990s. In terms of its constituent sectors, archaeology could now be regarded predominantly as a business domain which operates in a competitive economic climate and focuses on generating information. This situation is radically different from the previous dominance of employment in the State and education sectors with the clear focus on research which characterised earlier decades.

In response to these markedly changed circumstances and the consequential impact of new problems and challenges, a Foresight Study, leading to the production of this report, was initiated in 2004 by the UCD School of Archaeology, University College Dublin.

The main purposes of the Foresight Report are these:

- Present an assessment of the prospects for Irish archaeology to 2020.
- Provide a framework for addressing the systemic failures that characterise archaeology in Ireland today.
- Shift the focus from the generation of information to the creation and dissemination of knowledge.

## WHAT IS FORESIGHT?

Foresight is a process that challenges decision-makers and other key stakeholders to:

- Formulate shared, long-term perspectives on economic, social and cultural developments.
- Mobilise collective strategic actions.

As a strategic repositioning process, Foresight contributes to policy formation and the development of new forms of governance. It is increasingly deployed in a wide range of economic, social and cultural contexts.

## THE CONSULTATIVE PROCESS

Preparation of this report was informed by a Consultative Forum of knowledgeable and influential decision-makers and other stakeholders who were drawn from both the public and private sectors (Appendix 1). Insights and observations contained in their submissions, as well as the views expressed at its meetings, were used extensively in the preparation of a draft report.

To provide a wider input and a well-informed understanding of the major challenges facing Irish archaeology, the draft report was widely circulated and posted on the websites of both the UCD School of Archaeology and the Institute of Archaeologists of Ireland. Submissions from a wide range of organisations and individuals (Appendix 2), some in a personal capacity, were invaluable in providing a comprehensive perspective of the issues and challenges facing Irish archaeology. The contributions of the Consultative Forum and the submissions received are gratefully acknowledged. They were invaluable in compiling this Foresight Report.

## RECOMMENDATIONS

Repositioning archaeology in the knowledge society of 2020 should be characterised by organisational and directional coherence which is driven by the creation, communication and dissemination of knowledge.

The Foresight Report concludes that three Overarching Enabling Measures are fundamental to the prospects for repositioning Irish archaeology by 2020. As highlighted in the Executive Summary, these measures state that the following should be established:

- Archaeological Implementation Partnership
- Bureau for Archaeological Publication
- Inter-Institutional Collaborative Funding System

## FORMAT OF THE REPORT

The individual sections of the Foresight Report have been framed to deal comprehensively with the specific aspects of archaeology indicated in the section heading. While this involves some unavoidable repetition, it allows each section of the report to be read as a discrete entity.

The report was prepared by a Working Group, whose members were Gabriel Cooney, Muiris O'Sullivan and Liam Downey. The views expressed are those of the Working Group. The extensive support for the Foresight Study demonstrates the importance of this initiative in determining the future of Irish archaeology and the urgent need to act now.



### IRISH ARCHAEOLOGY TODAY

The scale and scope of Ireland's archaeological heritage are being revealed by the unprecedented growth in development-led excavations over the past decade or more. Recent estimates point to the discovery, on average, of a previously unrecorded site every two kilometres on linear infrastructural routes. Over 2,000 archaeological excavations, of varying scale and complexity, are now being carried out each year.

Irish archaeology today is characterised by a number of systemic failures. Chief among these are:

- The lack of clear, coherent structures and strategic directions which set out the role of central government in the regulation of archaeology, combined with the lack of connection – or *disconnectivity* – between development-led excavations and research-driven problems. These primary causative factors are highlighted by the under-resourcing of those national and local organisations with responsibility for archaeology and variations in excavation practices, reporting standards and databases.
- The accumulating and unsustainable backlog of unpublished excavation reports is possibly as many as 3,000-4,000 for Ireland as a whole. In the current circumstances, it is unlikely that many of these will ever be published.
- This failure to publish and create knowledge is not sustainable. In spite of the massive expansion of information generated by development-led excavations and other projects, there is an inadequate return on the substantial expenditures involved. As a result, much of the data collected is effectively rendered inaccessible to current and, more especially, future archaeologists, thereby precluding proper dissemination of discoveries and knowledge to wider interest groups.
- Curation and archiving of the records and material from excavations are reaching crisis proportions. With little in the way of effective policy or guidelines, storage space is at a premium. In the absence of publications, future generations of archaeologists and other researchers will encounter major, perhaps insurmountable, difficulties in interrogating and understanding the massive amount of information generated by recent and future excavations.

## WHAT FUTURE PERSPECTIVE COULD BE ACHIEVED?

If knowledge creation and dissemination are recognised as the inherent and fundamental purposes of archaeology, the repositioning of Irish archaeology in the knowledge society is both a fundamentally important and realistically achievable perspective.

A coherent framework that addresses the failures which characterise Irish archaeology needs to be developed. These failures include the compartmentalised operations and requirements of the public organisations and agencies with responsibility for archaeology. The framework to provide a new organisational approach and to integrate development-led with research-driven archaeology requires three ***Overarching Enabling Measures***. These are:

1. Establish an Archaeological Implementation Partnership.

This will develop coherent structures and strategic directions that deliver knowledge creation and facilitate economic and social developments (page 38).

2. Develop a Bureau for Archaeological Publication.

This will be dedicated to creating knowledge from the accumulating and unsustainable backlog of unpublished excavations (page 38).

3. Provide a nationally coordinated Inter-Institutional Collaborative Research Funding System.

This will help to reposition Irish archaeology in the knowledge society (page 43).

Other ***Important Strategic Support Initiatives*** are of crucial importance.

1. A National Archaeological Archive with proper resourcing (page 47).
2. Resource and develop the Archaeological Survey of Ireland, with particular regard to the continued updating of the Record of Monuments and Places in light of recent surveys and excavations (page 49).
3. A National Monitoring Programme. This will establish the survival and condition of recorded archaeological features (page 49).
4. An Inventory of Archaeological/Historic Landscapes and the use of Historic Landscape Characterisation (page 50).
5. Developing the role of local authorities in relation to archaeological research (page 50).
6. Review the excavation licensing system (page 51).
7. An agreed archaeological grading system to be used in assessing and grading archaeological sites and features (page 52).
8. Continuing Professional Development (page 53).
9. Developing public awareness, understanding and appreciation of the value of Ireland's archaeological resources (page 55).



# INTRODUCTION

## 1.1 CONTEXT AND RATIONALE FOR THE FORESIGHT STUDY

Archaeology today is operating in an environment that is entirely different from that of earlier decades. Formerly *time-rich but resource-poor*, it could now be said to be *time-poor but resource-rich*, at least in terms of excavation funding. With the explosion of development-led archaeology in the past decade or more, a number of systemic failures now permeate Irish archaeology.

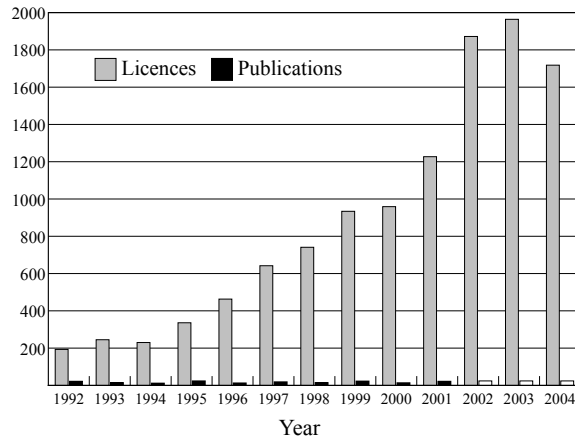
The extensive Foresight Consultative Process repeatedly highlighted deficiencies in the following areas:

- the overall lack of coherent structures and strategic directions
- the lack of connection between development-led and research-driven archaeology
- the curation and archiving of material from archaeological excavations
- the variation in excavation practices, reporting standards and databases

The accumulating backlog of unpublished excavations, especially those of national importance, is the most disconcerting feature of archaeology in Ireland today. While this is not a new problem, what was previously a serious situation has now become a potentially intractable problem. It is increasingly recognised that substantial numbers of excavations will not, or indeed cannot, be published because of the gap in time between the excavation and the detailed analysis and discussion for publication. Loss of memory and contextual understanding of the methods and approaches of those who created the records are key issues.

The most compelling reason why developers fund archaeological excavations is the production of a stratigraphic report; this is usually sufficient for the purposes of signing-off on planning conditions. Consequently, excavations tend to be undertaken in circumstances where the main emphasis is on mitigation – the need to resolve the impact of the development on archaeology, and to have the archaeological consultant(s) off-site prior to the commencement of

development. (Allied to this is the attendant risk of financial claims in the event of delays.) In these circumstances, post-excavation analysis is frequently deferred and increasingly distanced from the actual excavation stage. To inform and guide the excavation process, post-excavation analysis *must* be seen as a parallel and integral component of the excavation work programme. This is fundamental to shifting the focus of development-led excavations from information generation to knowledge creation and dissemination (Section 2.4, page 34). It will require an elemental change in mindsets within many public organisations and private companies concerned with archaeology. It also raises important questions about the funding of post-excavation analysis, curation and archiving, and most especially the publication of excavation reports.



*The number of excavation licences issued in the Republic of Ireland in the years 1992-2004, compared with the publication of excavation reports in the same period. Publication 2002-2004 estimated [after] O'Sullivan 2003, with additions]*

## 1.2 PROFILE OF IRISH ARCHAEOLOGY

Driven by major infrastructural improvements (road development, gas pipelines, building works) and urban renewal projects being carried out under the National Development Plan 2000-2006 (1), Irish archaeology has undergone quantum changes in recent years.

### *Increased Activity*

As detailed in the report on *The Future Demand for Archaeologists in Ireland* (2), the number of archaeological excavations in Ireland, both North and South, increased nearly 20-fold from about 50-60 per annum in the mid 1980s to 932 in 1999. This dramatic growth has continued since then, as shown by the number of new licences issued in 2002 and 2003 (nearly 2,000 each year). While licences can cover works of varying scale and duration, the 40-fold increase

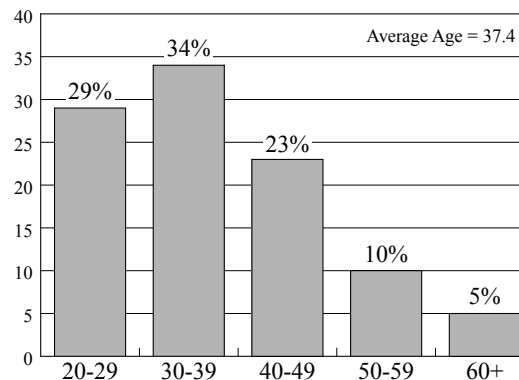


in the number of archaeological excavations in Ireland during the past two decades is nevertheless remarkable. This expansion is further demonstrated by the high number, range and geographical spread of archaeological interventions in recent issues of the annual report *Excavations*, which contains summary accounts of archaeological excavations in Ireland (3) and incorporates monitoring, assessments and licensed excavations.

### *Rising Employment and Sectoral Change*

In mid 2002, some 650 archaeologists were employed in Ireland (North and South). The vast majority were working for private-sector archaeological consultancies, engaged mainly in development-led archaeology. It is estimated that in 2006, the figure stands at 1,000. In the past decade, the increasing number of private-sector archaeological consultancies advertising in the magazine *Archaeology Ireland* (0-4 per annum in the first half of the 1990s rising to 13-16 per annum in the current decade) highlights the continued growth in demand for archaeologists in development-led archaeology. Reflecting this recent expansion, the sector is now comprised predominantly of a cohort of archaeologists in the 20-40 age bracket (4).

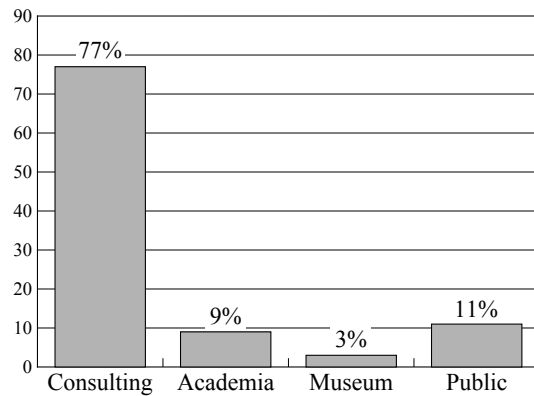
Compared to the exponential growth in the development-led sector, the number of archaeologists employed in what could be termed the research-led sector remains low (4). Bearing in mind the wide range of duties undertaken by these archaeologists in terms of research engagement, the figure represents not more than perhaps 20-30 in terms of full-time job equivalence. The establishment of the Discovery Programme in the early 1990s has been the most significant research development in recent decades. Archaeologists in other public agencies also have important research interests and commitments. In overall terms, the majority of those specifically engaged in research archaeology are in the universities. Since about 1970, there has been a



*The age profile of the archaeological profession. Based on a survey carried out in 2001 by CHL Consulting. As in Britain, the profession in Ireland is dominated by people in their 20s, 30s and 40s*

major increase (c. 250%) in the number of university students taking archaeology. A sizeable proportion of archaeological research in the universities is undertaken by graduate students, especially those pursuing PhD and MLitt degrees, which may be in the region of 70 per annum. In Northern Ireland, the Environment and Heritage Service, Department of the Environment, supports two contracted university units, one in Queen's University Belfast and the other in the University of Ulster, Coleraine.

Archaeology has changed from operating primarily in a research domain to a situation where it is now predominantly a private-sector service, undertaken by companies engaged in development-led archaeology. The scale and pace of this transition has placed unprecedented pressures on the public organisations with responsibility for archaeology and on the archaeological profession itself.



*The percentage of archaeologists working in different sectors of the profession. Based on a survey of employers of archaeologists carried out in 2001 by CHL Consulting*

In the public services, resources are mainly focused on regulatory functions, and to a much lesser extent on longer-term strategies. In relation to regulatory functions, significant operational difficulties arise not only from resourcing issues but also from a focus on short-term rather than on strategic, longer-term considerations. This can be seen, for example, in the necessity to cope with the quantity of planning applications that require attention and assessment, and in ensuring that the quality of the statutory reports required in relation to the excavation licensing system meet the necessary professional standards. In addition, relatively little attention is being paid to the sustainable management of heritage for the general public good.

## 2.1 DRIVERS OF CHANGE

A number of major drivers of change will impact on Irish archaeology and determine its future direction. These are the most important.

*Extensive infrastructural developments are expected to continue until 2012, and possibly beyond, under the next National Development Plan*  
Public organisations responsible for managing and regulating archaeology and the profession itself are finding it difficult to respond to the radical pace and scale of changes and their impact on Irish archaeology.

*Implementation of the National Spatial Strategy (5), with its strong focus on the development of urban gateways and hubs*  
This has important implications for archaeology in the Republic of Ireland. It is especially obvious in terms of the impacts of urban change, road building and other developments, and on changing settlement patterns.

*The location of urban-generated housing, public utilities, and infrastructure in rural areas*  
Urban/rural interface areas are experiencing unprecedented pressures from competing spatial demands, including one-off houses. Allied to this are the growing demands for access to upland and wetland areas, with their rich archaeological and natural heritage.

*The further concentration and intensification of commercial farming, especially in the more productive agricultural areas of Munster and south Leinster (6)*  
Greatly increased pressures on archaeology will arise due to land improvements, including the unrecorded removal of earthen banks, ditches and field boundaries. There is also the potential for physical and chemical impacts of tillage practices on archaeological features.

*The withdrawal of agriculture from the western counties and other marginal farming areas (6)*  
The resulting replacement of traditional rural landscapes with scrub encroachment and extensive afforestation with commercial coniferous species will have an adverse effect on the cultural and natural heritage of upland and wetland areas.



*The changing Irish landscape, Carrickmacross, Co. Monaghan. Aerial photograph illustrates the excavation of an early medieval (AD 600-1200) ringfort defined by two concentric ditches at Lissanisk, Co. Monaghan on the route of N2 bypass of the town. Ringfort overlooks what is probably a broadly contemporary crannóg in Lissanisk Lough. Also illustrates the current expansion of the town [Studio Lab]*

#### *Progressive amalgamation of farms*

As a result of this, long-standing familial associations with archaeological features will be eroded significantly. Large parts of the rural landscape will be remodelled by the increasing spatial differentiation in agriculture (6). Thus the immediate years ahead constitute a high-risk period for Ireland's rural archaeology. The value of public goods associated with agriculture – including archaeological features and amenity areas, as well as public access to these – will become issues of growing national importance and public conflict.

#### *Greater compliance with European Union (EU) Directives*

This may progressively reduce the impacts of agriculture on the natural environment, but it will not mitigate its impacts on the archaeological heritage to the same degree. As currently constituted, EU Directives relating to the environment are largely concerned with what is defined as the natural environment. The cultural heritage, including archaeology, is dealt with to a much lesser extent. A similar imbalance exists in agri-environmental schemes such as the Rural Environment Protection Scheme (REPS) in the Republic (7) whereby there is currently more attention given to measures to sustain the character of the natural environment. Farmers in Northern Ireland who participate in agri-environmental schemes are paid for managing archaeological sites, which are monitored on a regular basis. In both parts of Ireland, resources for environmental regulation tend to be concentrated on those aspects covered by European Directives. Consequently, there has been a relative marginalisation of the built heritage within national and EU environmental conservation measures.

#### *The national commitment to more extensive afforestation, in response to carbon-sequestration requirements and demands for alternative energy sources, combined with the expected structural changes in agriculture (8)*

Low-level and sub-surface archaeological features, largely unknown and therefore effectively unprotected by legislation, will be most adversely affected. In addition to existing guidelines in relation to forestry and archaeology, improved planting and land-use strategies are urgently required to minimise the potential impacts of afforestation on Ireland's archaeological heritage.

*The continuing impact of peat extraction on wetland archaeological features*

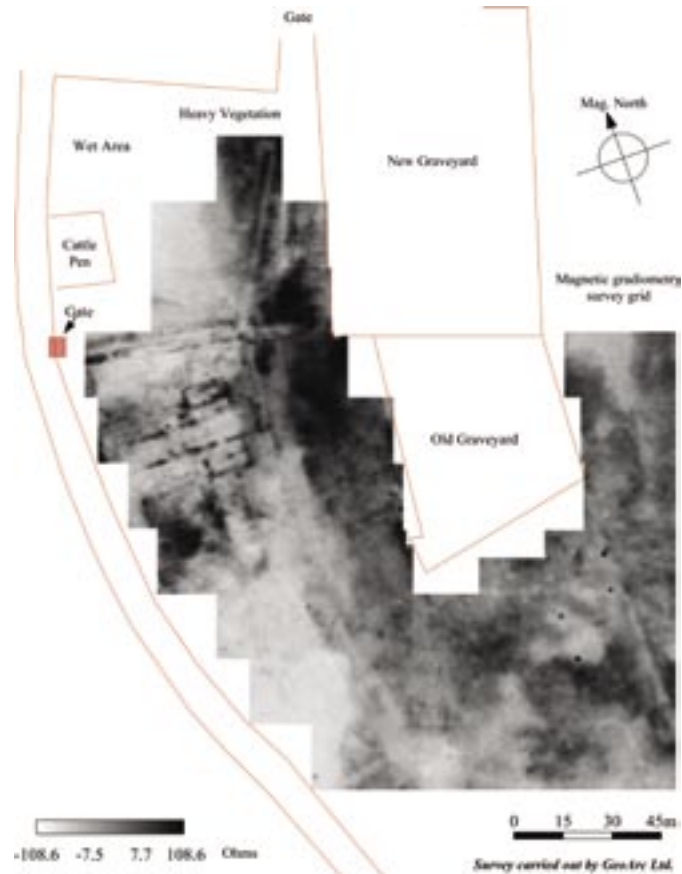
This longstanding concern will continue until the Bord na Móna bogs are exhausted. Exploitation of private peatlands, currently being developed without any archaeological regulation, will also continue to pose a threat to Ireland's cultural heritage.

*A substantial enhancement in the investigative capacity of archaeology*

This will be achieved through the more widespread use of Geographical Information Systems (GIS), geophysical prospecting techniques and other new technologies such as Lidar (a detection and survey approach which works on the principle of radar, but uses light from a laser). Allied to this, the development of predictive models to assess the location and character of previously hidden archaeological material will be facilitated by more advanced databases and associated computational techniques.

*New challenges and opportunities for archaeologists arising from the further development of the information society*

To harness the full benefits of developments in information and computing technology (ICT), digital media and wireless communications, a technology and multi-media strategy for archaeology in Ireland must be developed.



*Geophysical survey can reveal buried features with very high levels of definition. A resistivity survey as part of archaeological assessment in advance of housing development at Kilbeggan, Co. Westmeath, revealed the ground plan of a medieval (AD 1200-1600) Cistercian foundation which, while known historically, had no surviving surface trace. The church and cloistral buildings to the south of it can be clearly identified [GeoArc Ltd for Alan Hayden]*

*Increased politicisation of archaeology, involving polarised and often poorly informed public understanding and debates*

To address this situation, the archaeological profession needs to become much more proactive in developing evidence-based policies or frameworks which set out all the archaeological considerations involved. Growing public confusion would be allayed, at least in part, by more concerted dialogue between senior members of the archaeological profession and senior officials from the appropriate government departments and agencies (see Archaeological Implementation ie Partnership, page 39).

## 2.2 ISSUES AFFECTING IRISH ARCHAEOLOGY TODAY

In recent decades, the development-led boom has brought about fundamental changes in Irish archaeology. Formerly dominated by research concerns, virtually all excavations are now undertaken in response to infrastructural and other developments. For the most part, the archaeological profession has coped well with this unprecedented demand. Now, however, the scale and pace of institutional changes required to accommodate and manage the massive growth in development-led archaeology are beyond the resources and capacity of the prevailing organisational structures and archaeological research organisations.

Economic growth and investment programmes such as the National Development Plan 2000-6 (1) certainly enhance opportunities for investment in archaeology. However, the majority of submissions made by participants in the Foresight Consultative Forum, allied to the observations made at its meetings, reflect a widespread and growing concern about the current state of Irish archaeology. This was variously described as: a profession trying to come to terms with itself; a discipline in crisis or in a state of paralysis; and a situation which, in a 'do-nothing' scenario, will inevitably continue to the detriment of the archaeological heritage in the Republic of Ireland and Northern Ireland. A number of important issues reflect the critical state of Irish archaeology.



*Aerial photograph of test trenching (backfilled) carried out as part of the archaeological assessment of the M7 Portlaoise-Castletown/M8 Portlaoise-Cullahill motorway scheme. Illustrates the normal layout of test trenches on the route of road schemes with offsets from a central spine [Narrowcast]*



*The current fragmentation and sectional institutional arrangement of those State bodies charged with protecting Ireland's archaeological heritage*  
This fragmentation has reduced efficiencies and effectiveness and has led to confusion regarding responsibilities.

In the Republic of Ireland, the National Monuments Section is within the remit of the Department of the Environment, Heritage and Local Government. The Office of Public Works, which has a duty of care for State historic properties, including National Monuments, is under the Department of Finance. The National Museum is under the aegis of the Department of Arts, Sport and Tourism. Clearly a more coherent institutional structure is an imperative.

In Northern Ireland, the protection of the built archaeological heritage is under the remit of the Department of the Environment (Environment and Heritage Service), while the Ulster Museum, part of the National Museums and Art Galleries of Northern Ireland framework, is under the aegis of the Department of Arts, Culture and Leisure.



*Aerial photograph of the medieval moated site at Kilaraght, Co. Sligo. Moated sites are defended farmsteads dating to the Anglo-Norman period (AD 1200-1400) [National Monuments Section, Department of the Environment, Heritage and Local Government]*



*Aerial photograph of Dunluce Castle, Co. Antrim. The name and the presence of a souterrain suggest early medieval activity. The earliest parts of the castle are probably 14th century but many of the buildings date to the late 16th and early 17th centuries when it was the MacDonnell stronghold [Environment and Heritage Service, Department of the Environment, Northern Ireland]*



*Aerial photograph of enclosure ditches at Clonfad, Co. Westmeath, along the route of the N6 Kinnegad-Kilbeggan dual carriageway. Clonfad medieval (AD 1200-1600) church and graveyard are shown in the background, to the right of the road route [Valerie J. Keeley Ltd]*

The protection of monuments on farmland is a shared responsibility between the Department of the Environment (Environment and Heritage Service), and the Department of Agriculture and Rural Development.

*Exponential growth in licensed archaeological excavations since the 1980s*

The number of archaeological excavations in Ireland has increased some 40-fold in the past two decades (page 15). Currently some 2,000 licences are issued in the Republic of Ireland each year.

*The lack of accessible archaeological knowledge from development-led archaeology and the accumulating backlog of unpublished excavations*

There is now an unsustainable backlog of unpublished excavations: 1,353 in the Republic of Ireland in the late 1990s (9). The non-publication of significant archaeological sites was obviously a feature of the profession long before the relatively recent development of the private consultancy sector. Now, however, the number of unpublished excavations is increasing substantially — there may be as many as 3,000 to 4,000 for the island as a whole.

*The quality of excavation reports submitted to the statutory authorities*

While the majority of excavation reports are of a fair-to-good standard, a large number require further, fundamental post-excavation analysis and interpretation prior to publication. Only a very limited percentage (an estimated 5%) are suitable for immediate publication.

*The continuing deterioration in the quality and usability of archival material and unprocessed samples from unpublished excavations*

The essential records of excavations, these are critically important components of the historical record and are crucial in extracting the maximum information from excavations.

*The inadequate contribution of development-led excavations to the enhancement of archaeology's knowledge base*

This is a direct consequence of the backlog of unpublished excavation reports. It is also a result of the situation in which development-led archaeology is seen primarily as a condition of planning which must be complied with.

*The absence of an overall strategic direction in archaeological research*

This results in fragmentation, lack of critical mass and competing research, educational and other demands.



Annotated aerial photograph of an early medieval (AD 600-1200) complex at Raystown, Co. Meath, on the route of the N2 Finglas-Ashbourne road scheme. Important components of the complex were occupation areas, a number of water mills and a cemetery within a defined enclosure [Studio Lab/CRDS Ltd]

### *Continued loss of archaeological features*

This arises from a variety of factors, including: housing, road, quarry and other developments; land improvements for agriculture; scrub encroachment on abandoned agricultural land; forestry developments; and peat extraction. To this must now be added climate change (10) with its attendant impact on coastal areas, water, rural and urban landscapes, and archaeological features.

### *Growing public disenchantment with archaeology and indeed within the profession itself*

It is often perceived that archaeology is primarily to blame for persistent delays in motorway construction and other infrastructural developments. Disenchantment also arises when the profession itself fails to communicate properly with influential decision-makers and the general public. There is a gap in the provision of easily accessed information about the evidence-based importance of archaeological features and their crucial role in enhancing our knowledge of the past and Ireland's unique cultural identity.

## **2.3 FACING THE CHALLENGES**

To overcome the systemic failures outlined above, two central and inter-related challenges need to be addressed by the public organisations and professional bodies with responsibility for Irish archaeology.

- 1** Tackle the lack of cohesion between the compartmentalised operations and requirements of various public organisations and agencies involved in archaeology. This will encourage more 'joined-up thinking' and better inter-institutional collaboration.
- 2** Deal with the need for knowledge creation and dissemination now hidden in the massive volumes of information being generated by development-led archaeology. This will raise public awareness and lead to a better understanding of the magnitude of the record and the potential gains to Ireland's cultural heritage.

If these two crucial challenges are to be addressed, a more coherent organisational structure for the management and delivery of improved, integrated archaeological research and development services is the fundamental requirement



*Excavation in progress of the outer ditch of an early medieval (AD 600-1200) ringfort defined by two concentric ditches at Hughes'-Lot East, Co. Tipperary, on the route of the N8 Cashel bypass [Richard O'Brien, Tramore House Regional Design Office]*

(Section 3.1, page 38). In addition, better-defined tendering procedures and an Archaeological Research Agenda are needed to optimise the knowledge return and value for money derived from archaeological excavations. Because of inherent weaknesses in the prevailing institutional/administrative framework throughout the decade on either side of the millennium – what may be termed the ‘Celtic Tiger Archaeology’ period in the Republic of Ireland – this period could be seen by future generations as the greatest missed opportunity in terms of both the wealth of sites uncovered and in the apparent availability of finances which could have been channelled into the publication of the results.

### *Tendering Procedures*

To a significant extent, growing concerns about the knowledge return from development-led archaeology are a consequence of the current tendering procedures. These are primarily constructed to meet the service function of archaeology, to the detriment of research and knowledge. To address this inherent weakness, project tendering documents should include: the conceptual and research archaeological aims of the excavations; the project design and methods used to meet these aims; the publication strategy as well as the specific costs. Without the publication dimension, the chain of knowledge production will remain incomplete. Allied to this, the inaccessibility of archival records in public repositories is a serious constraint on their wider use. When this is considered alongside the large volumes of excavation material not in public care (Section 3.2, page 47), the knowledge return on the sizeable costs of archaeological excavations must be brought into question.

### *Value for Money*

If subjected to thorough scrutiny, a comprehensive cost-benefit analysis of development-led archaeology could prove to be quite negative. Viewed from the perspective of facilitating infrastructural development and the investment involved in it, expenditure on archaeological excavations may not appear excessive. However, the expenditure incurred will be very difficult to justify if the main outputs of development-led excavations continue to be nothing more than information generation. It is becoming increasingly obvious that much of the information being generated by development-led



*Aerial photograph of a large middle-to-late Bronze Age (1500-500 BC) settlement at Corrstown on the outskirts of Portrush, Co. Antrim. There were over 50 round houses; a road winds through the settlement; and there were also cobbled paths between the houses. The settlement was reused in later periods [ACS Ltd]*

archaeology cannot be used to create new knowledge about the past. This is due to a number of factors: the loss of the contextual understanding of the methods and approaches used; and the loss of personal memory of those involved in the excavations (many of whom may have moved on to other projects, employers or indeed other countries or professions).



As it relates to development-led archaeology, value for money penetrates far beyond tendering procedures, information generation, cost controls and delivery deadlines. In addition to mitigating the impact of developments on archaeological features, it must also include the creation and dissemination of knowledge from the massive expansion of information being generated by development-led excavations and other archaeological projects. The current overall primary focus on data and artefact retrieval is unsustainable. It does not give an adequate return on the substantial costs being expended on development-led archaeology.

### *Archaeological Research Agenda*

Research design is fundamental to optimising the knowledge creation potential of development-led archaeology. Priority questions about the past which are derived from an agreed, Ireland-wide *Archaeological Research Agenda* (page 45) must be considered in the design of development-led projects. By focusing existing resources on strategically important research areas/questions, such a programme would provide research directions for development-led archaeology. In particular, it would allow research design to be used most effectively in the tendering process. This, in turn, would lead to a shift away from the *lowest price approach* to a situation where *quality for money and knowledge creation* become the critical determinants. Clearly this significant change will require modifications in tendering (and licensing) conditions. There must also be provision for the proper investigation of potentially important yet unexpected insights and features that present themselves during the course of excavations. While some practitioners follow this approach already, they are frequently operating in isolation from relevant, up-to-date information and approaches. In such circumstances, significant discoveries are often not integrated into the wider framework of archaeological research and most have not been properly published. In the absence of proper analysis, they frequently fail to inform current thinking on archaeological issues, or the content of educational programmes and research projects. Also, the wider archaeological community and other interest groups frequently remain relatively uninformed regarding the significance of important discoveries.



*Aerial photograph of three early Neolithic (4000-3500 BC) houses at Monanny, Co. Monaghan, in the course of excavation on the route of the N2 Carrickmacross bypass [Studio Lab/IAC Ltd]*

There is a pressing need for new institutional and funding arrangements which are designed to bring about closer collaboration between development-led and research-driven (or knowledge creation) archaeology. Archaeology undertaken as a service which lacks an explicit research agenda cannot deliver in terms of either knowledge or ‘quality for money’.

## 2.4 FROM INFORMATION GENERATION TO KNOWLEDGE CREATION

The concept of *Knowledge Archaeology* may provide the basis for developing a consensus on the importance of *repositioning Irish archaeology in the knowledge society*. The central feature of this new perspective would be the development of a coherent framework that integrates development-led and knowledge-creation archaeology and, most crucially, the dissemination of that knowledge.

*Disconnectivity* between the generation of information and both the creation and dissemination of knowledge characterises archaeology in Ireland today. This is reflected in the prevailing approach to development-led archaeology. A perception seems to exist, at least among some interest groups, that development-led archaeology is undertaken solely for the purpose of removing archaeological features from sites as rapidly as possible in order to facilitate infrastructural developments. Also, there seems to be an impression that the ‘job is done’ when the technical reports required by the licensing system have been made available. While the National Roads Authority and other State development agencies provide funding for publication, there is no such onus on private developers (where excavations are undertaken on their behalf) to pay for the publication of excavation reports.

These are important factors in the politicisation of archaeology by those opposed to specific developments. In some instances, there may be well-founded professional reasons for such objections. In others, local interest groups may be concerned with the economic and social impact of the proposed developments. In both circumstances, the growing politicisation of archaeology may reflect a lack of confidence in the ability of the existing institutional system to deal with the complex and conflicting issues that are often involved in mitigating the impact of development on archaeology.

Up until the 1980s, excavations largely served a research function (Section 1.2, page 15). The primary aim was to integrate the emerging results of excavations into a research context derived from libraries, museum collections and other sources. Although not in all circumstances, the excavations generally resulted in the creation and dissemination of new insights/knowledge in relation to Ireland's past. As already outlined (Section 2.3, page 27), the main concern with today's predominantly development-led approach is that much of the information/data collected is not, and increasingly cannot be, turned into knowledge.

The success of any archaeological project must be judged primarily by the research questions/issues it sets out to answer and the knowledge it produces. With some exceptions, the current preoccupation of development-led archaeology is largely with data/information collection and management rather than the quest for knowledge. To address this situation, immediate priority must be given to the standardisation of data collection/recording and to its interpretation by directors and other archaeologists involved in excavation projects.

Unless the disconnectivity between information generation and knowledge creation/dissemination is addressed immediately, the quality of records which were built up at great expense will deteriorate rapidly. This is due to the potential loss of memory and understanding of the methods and approaches adopted, of contextual details as well as of the links between features and records. To ensure that this does not occur, there is an urgent need for a Bureau of Archaeological Publication (Section 3.1, page 38). This bureau will be responsible for commissioning research which adds knowledge value to the massive reservoir of information/data generated by development-led excavations. It will also ensure that publications appear in appropriate formats.

As was evident at the archaeological conferences organised by the National Roads Authority in 2004 and 2005 (11), many development-led excavations are carried out in a professionally exemplary manner. Indeed many have generated much useful information from sites spanning the course of human settlement on the island of Ireland. However, even where the information is of a high value, much of it is currently piece-meal in nature and is often isolated from the broader research and knowledge context that would give it greater meaning. If collated and analysed within defined

research themes as part of an agreed Archaeological Research Agenda (Section 3.1, page 45), and with publication in a variety of formats through the proposed Bureau of Archaeological Publication (Section 3.1, page 38), it could transform prevailing views and interpretations of many important aspects of our understanding of Irish societies in the past.

There are, of course, a number of inherent obstacles that would have to be addressed in developing such a coherent research and publication programme. In particular, there is the issue of access to, and the quality of, excavation reports. The removal of these obstacles is a prerequisite to overcoming the disconnectivity which characterises Irish archaeology at the beginning of the 21st century.

In a society undergoing significant and swift change, with the consequent rapidly changing character of our landscapes, archaeology can provide society and local communities with knowledge, greater understanding and new perspectives on the past. These issues will be of even greater importance by 2020 when Irish society will be more culturally diverse.



*Yew wood pipes, thought to be from a composite musical instrument, uncovered during monitoring of preparation works for a residential development at Charlesland, Co. Wicklow. Found in the trough of a fulacht fiadh. A radio-carbon date of 2137-1909 BC makes it Europe's oldest piped musical instrument [Margaret Gowen and Co. Ltd]*



## INITIATIVES TO REPOSITION ARCHAEOLOGY IN THE KNOWLEDGE SOCIETY

Among the important initiatives required to reposition archaeology in a more favourable perspective (outlined in Section 2.4, page 34), immediate priority needs to be given to the following Overarching Enabling Measures.

### 3.1 OVERARCHING ENABLING MEASURES

#### *Archaeological Implementation Partnership*

The key requirement is the establishment of an Archaeological Implementation Partnership. This would be comprised of decision-makers from the appropriate government departments and development agencies, and senior archaeologists from the relevant public and private organisations, including the Institute of Archaeologists of Ireland. Such a public-private partnership would provide a high-level forum for productive dialogue between the different sectors and interests. It would play a central role in building a consensus between decision-makers, archaeologists and other stakeholders on future policy directions. In addition, it would lead to the progressive development of a 'system that delivers', with particular regard to the measures and initiatives proposed in Sections 3.1 and 3.2 of this report. Such a partnership could be developed both in the Republic of Ireland and Northern Ireland, with provision for cross-border cooperation.

#### *Bureau for Archaeological Publication*

To deal with the rapidly accumulating and unsustainable backlog of unpublished excavation reports (Section 2.2, page 26), a Bureau for Archaeological Publications is required immediately. The number of nationally significant unpublished excavation reports is currently in excess of 400. The conclusions and recommendations of the *Unpublished Excavations Survey 1930-1997*, commissioned by the Heritage Council (9), provide compelling evidence for the need for a properly resourced system dedicated to the future management of excavation publications. This would deal not only with the backlog but would also develop a system for the prompt publication of current and future excavations. As its primary function, the proposed bureau would develop and implement a systematic and proactive publications programme.



*A series of photographs showing a conservator lifting a Bronze Age burial vessel containing cremated bone. From the Bronze Age cemetery at Drumsallagh, Co. Meath, found on the route of the M3 [Mary Deevy, Meath County Council National Roads Design Office]*



- **Priority 1**

As its first priority, the bureau's publication programme should deal with those excavations that are considered to be nationally important. Based on agreed criteria, this programme should be designed to meet two distinctly different publication goals: research and dissemination. The feasibility of having nationally important reports published in two formats should be considered:

- *a research-oriented publication.* This will be aimed at professional researchers and educators.
- *an information-dissemination publication.* This will be designed to make the results of nationally important excavations more accessible, with synopses and syntheses of the new knowledge derived from the information generated by excavations.

In order to make a significant impact on the backlog over a five-year period, the bureau should be given a target of publishing 10 to 20 nationally significant excavations per annum. This would require an annual budget of some €5million. It should be noted that such a financial provision, although significant, represents a relatively small proportion of the continuing total expenditure on excavations.

- **Priority 2**

As its second priority, again based on agreed criteria, the bureau's publications programme should deal with the backlog of excavations that are considered to be of significant regional importance. The Heritage Council's Survey (1930-1997) categorised 340 excavations as being of regional significance (9). That number is now in the region of 600-800. A number of these have been or will be published as articles in research or other publications, including those produced by local archaeological/historical societies. However, to be effective in mitigating the backlog of regionally significant excavations within a reasonable time – and before the contextual knowledge and understanding of the archaeological excavator is lost – a more proactive, managed publications programme is crucial.



*Excavation of a prehistoric circular enclosure at Barnageeragh, Co. Dublin, in advance of a housing development. On this site there was a wide range of activity, extending from Neolithic houses to medieval settlement [ADS Ltd]*

The proposed Bureau for Archaeological Publication could accomplish this by publishing a series of booklets which contain synopses of the main conclusions of regionally significant excavations. In addition to informing archaeologists and other professionals of new developments, the booklets would also make a major contribution towards ensuring that the outcomes of excavations are more accessible to other interested groups, including local archaeology/history societies and outreach education programmes. A good example of this is the recent series of leaflets published by the National Roads Authority. In highlighting the important features discovered during archaeological excavations undertaken as part of the road development programme, this is a welcome and worthwhile initiative that should be continued and built upon.

To make a significant impact on the rapidly growing backlog over a five-year period, the bureau should be given a target of publishing up to 30-40 booklets on regionally significant excavations each year. The cost would be in the region of €0.5 million per annum. To maintain the costs within reasonable limits and to ensure ease of publication, the bureau would specify the booklet format, size and number of diagrams/figures/photographs that could be accommodated. The name(s) of the directing archaeologist(s) would appear on the booklets, and the author(s) would have complete responsibility for providing the bureau with a 'ready-to-print text'. The backlog will not be addressed if the bureau has to edit each submitted text.

Preferably, the proposed bureau should be assigned to an existing body, as a specially constituted unit or function dedicated to managing the publication of archaeological excavations. Provision must be made for the necessary intellectual input from excavation directors in the preparation and publication of reports. The feasibility of having the proposed bureau set up as a public-private partnership may merit consideration. One mechanism for funding such a partnership could be provided by incorporating a graduated publication charge in the conditions attached to archaeological licences. This charge would be appropriate to the scale of different excavations.

### *Inter-Institutional Collaborative Research Funding System*

Throughout the European Union, universities from different countries are collaborating in extensive research programmes and networks (12). In Ireland, there is insufficient cooperation between the university Departments/Schools of Archaeology, between them and the State institutions with responsibility for archaeology, and with the archaeological consultancy sector itself. As a result of this fragmentation and lack of critical mass, there are inherent weaknesses in Ireland's archaeological research capacity. This has been recognised as a wider problem in Ireland's research capacity, and the Irish universities are proposing the development of *4th-Level Ireland*, with graduate schools and programmes providing a key integrative mechanism (13).

To address the structural weaknesses in archaeological research, a graduate institute or school may be envisaged. This would involve university Departments/Schools of Archaeology, other research institutions such as the Discovery Programme, the statutory organisations with responsibility for archaeology, and the archaeological profession. There would also be collaboration with researchers in other disciplines such as biological and environmental sciences, history, geography, folklore and anthropology.

Significant cooperation in archaeological research will only be brought about by the establishment of an Inter-Institutional Collaborative Research Funding System, similar to that already existing in some areas of scientific research, such as food and the environment. An equivalent funding system to stimulate archaeological research should be provided under the National Development Plan 2007-2012. Such a funding system is essential to achieve the real, durable cooperation necessary to create the critical mass of expertise required if Ireland is to be at the forefront of international developments in archaeology. To have a worthwhile impact, a fund of €5 million per annum would be required to finance 5 to 10 sizeable initiatives in archaeological research. The proposed fund would be managed by a broadly based partnership board; it would comprise knowledgeable stakeholders, including archaeologists from both public and private sectors, and senior public officials.



*The Discovery Programme's Medieval Rural Settlement Project is investigating the O'Conor lordship in north Roscommon. Data is being integrated using GIS and a photogrammetric aerial survey as a base data set. Here at Carns, Co. Roscommon, relict early medieval and medieval field boundaries and settlements (AD 600-1600) are shown superimposed on a 1:7500 aerial photograph [BKS Ltd/Discovery Programme]*

- *A National Archaeological Research Agenda*

A key requirement for the effective deployment of the aforementioned collaborative fund is a National Archaeological Research Agenda. The development of an indicative rather than prescriptive agenda of well-informed archaeological research themes requires a series of workshops on relevant issues and themes. An agreed research agenda would be beneficial from a number of perspectives:

- Identify nationally and regionally important strategic research issues/questions that would receive priority under the proposed Inter-Institutional Collaborative Research Funding System.
- Document the new insights that can be derived from the massive array of information accumulated from development-led archaeology in the past decade.
- Develop research questions that need to be considered when designing and commissioning development-led projects (Sections 2.3, page 32).
- Commission baseline data searches, research and knowledge generation from the outcomes of development-led archaeology.
- Recognise the need to incorporate data from a range of sources – such as palaeo-environmental research, wetlands and maritime archaeology – into wider research issues.

By focusing resources on important information gaps in existing archaeological knowledge, the development of a well-founded, structured research agenda could help to expedite the planning of development-led projects. The proposed National Archaeological Research Agenda should be drawn up by a representative group of knowledgeable and influential archaeologists from research and development-led archaeology, as well as decision-makers from both the public and private sectors. The agenda should provide a broad strategic perspective of national research priority



*Excavation of 17th and 18th century structures at Smithfield, Dublin. Excavation was undertaken in two phases to facilitate construction. The well-preserved remains were of buildings and properties shown on John Roque's map of Dublin in 1756 [Margaret Gowen and Co. Ltd]*

themes. An extensive, uncoordinated shopping list will not receive the financial support urgently required for a nationally coordinated archaeological research programme.

The development of a National Archaeological Research Agenda would enable research design to become an integral part of the excavation tendering procedures (Section 2.3, page 30). As already indicated, this would lead to a shift away from the *lowest price* approach to a situation where *quality for money*, and in particular *knowledge generation*, would be important determinants of competitiveness in consultancy archaeology.

### 3.2 IMPORTANT STRATEGIC SUPPORT INITIATIVES

To ensure the success of the Overarching Enabling Measures (Section 3.1, page 38), a number of Important Strategic Support Initiatives need to be put in place. These are outlined below.

#### *A National Archaeological Archive*

The National Museum of Ireland houses the bulk of the national collection of archaeological artefacts. Over the past 15 years, however, the stock of archaeological material retrieved by development-led excavations has been growing at a rate considerably faster than was anticipated. This accumulation is overwhelming the current provision for the storage and management of artefacts. Museums, including the network of local museums in both the Republic of Ireland and Northern Ireland, do not have the capacity to cope with the influx of material so as to make it usable for the creation of knowledge (14). As it stands, the storage and conservation of environmental samples frequently depend on the resources available in the private sector.

To address the impending curation crisis, a properly resourced National Archaeological Archive is a compelling need. A condition survey of a representative sample of the vast quantities of archaeological material already in stores, both conserved and un-conserved, is necessary to quantify the level of investment required. An immediate and sustainable



investment in terms of staff and other resources is an absolute imperative. This should be targeted at the central institutions, as well as towards developing a more coherent national/regional/county network for the curatorship and archiving of archaeological materials. The conservation demands associated with managing ever-increasing materials must not, however, be allowed to overwhelm the central role of museums in organising presentations and exhibitions that meet a wide range of public awareness and outreach requirements.

Taking into account the Standards and Accreditation Scheme for the Irish museum sector developed by the Heritage Council (15), a sustainable regional strategy for the organisation and resourcing of local museums

is an immediate requirement. This should consider: the overall coordination roles of the National Museum of Ireland and the National Museums and Art Galleries of Northern Ireland (MAGNI); the need for better field project communication between agencies; and, in the case of local excavations and other projects, greater involvement by county museums in delivering more integrated services and public information.



*Animal bone from midden deposits at Coolure Demesne crannóg, Co. Westmeath. The crannóg was most intensively used between the 7th and 11th centuries AD. Specialist analysis demonstrated the presence of cattle (adults and calves), sheep/goat, pig, horse and red deer [UCD School of Archaeology]*

### *Resource and Develop the Archaeological Survey*

The proper resourcing and further development of the Archaeological Survey of Ireland are essential infrastructural requirements, especially from the viewpoint of the continuous digital up-dating of the Record of Monuments and Places. Early priority must be given to capturing the vast array of new information generated by recent extensive excavations, and to providing more extensive access to information through advances in information technology (Section 2.1, page 21).

### *A National Monitoring Programme of Recorded Archaeological Features*

As recommended in the Heritage Council report, *Archaeological Features at Risk* (16), a system needs to be established to monitor the present condition and survival of recorded archaeological features, at both national and local levels, and at appropriate intervals.

In Northern Ireland, the Condition and Management Survey of the Archaeological Resource (funded by the Environment and Heritage Service, Department of the Environment) is being carried out by the Centre for Archaeological Fieldwork at Queen's University Belfast. This has monitored and reported on the condition of a 10% sample (1,500 sites) of the monuments in Northern Ireland's Sites and Monuments Record (17).

The Archaeological Survey of Ireland is of central importance in continuing to record archaeological sites and monuments in the Republic of Ireland. In this context, the Department of the Environment, Heritage and Local Government has recently proposed a methodology for the regular monitoring of recorded archaeological monuments. (This proposed system should not be confused with the statutory monitoring role of the National Monuments Section of the Department.) Its function would be to monitor the condition and survival of a statistical sample of recorded archaeological monuments/features. These should be re-surveyed at five-year intervals. A more comprehensive programme – such as the Condition and Management Survey of the Archaeological Resource for Northern Ireland or the Monuments at Risk Survey in England (18) – will be required in the longer term.

### *An Inventory of Archaeological/Historic Landscapes and the Use of Historic Landscape Characterisation*

There is a need to view archaeological sites in their wider landscape setting and to engage with the practical issues of defining and managing archaeological landscapes and the archaeological/historic character of the Irish landscape. From work to date and the continuing debate about what constitutes an archaeological landscape, it is clear that there is a growing need to develop precise, consistent criteria to define what constitutes an archaeological landscape. A crucial issue is the approach to and the means of determining the boundaries of such landscapes, defining core and buffer zones. A methodology for this has emerged from work commissioned by the Heritage Council (19, 20). A key proposal is the establishment of a consultative group with the significant involvement of the relevant agencies. This group would drive the concept forward and get a consensus view of both definitions and mechanisms for drawing up an inventory of such landscapes. The application of Historic Landscape Characterisation (21) provides an opportunity to identify the major historic processes responsible for the form and development of Ireland's landscapes.

### *Developing the Role of Local Authorities*

Through the provision of more decentralised heritage management services, local authorities are playing an increasingly crucial role in the management of archaeological resources, including the development of regional awareness and local identity.

The devolution of increasing levels of responsibility for heritage to local authorities needs to be undertaken within the context of a coherent national plan. The plan should set out the relative functions of central and local government in relation to heritage matters and provide for adequate resourcing at local authority level. An important concern in this regard is the commitment of local authorities both to the appointment of archaeologists and to the establishment of the organisational structure which will manage heritage resources effectively. In those counties that have appointed the necessary staff, archaeologists in conjunction with the heritage officers are providing an invaluable service. In addition,



*Photograph of Cairn S Neolithic passage tomb (c. 3500-3000 BC) on Carnbane East at Loughcrew, Co. Meath, from the southeast. Part of the archaeological landscape at Loughcrew [UCD School of Archaeology]*

the establishment by local authorities of Heritage Offices to coordinate the functions of archaeologists, conservation officers and heritage officers needs to be pursued. Included among the important functions that such offices could provide are information services in relation to archaeological amelioration, licensing and excavation processes. Support networks and information-sharing among local authority archaeologists would ensure communication, best practice and standardisation of approaches.

The local authority levy on development, currently devoted to the provision of amenities, could be expanded to include provision for the conservation of features of archaeological importance. To achieve greater public awareness and understanding of archaeology, a number of additional initiatives should be pursued. For example, the significant work of 'artistic expression' put in place at the completion of NRA road schemes should be linked more clearly to the heritage of the locality. Housing developments should also highlight, where possible, contextually relevant archaeological features with informative, explanatory plaques.

### *Review of the Excavation Licensing System*

The current licensing system needs to be reviewed in consultation with the appropriate stakeholders. In particular, the situation

needs to be addressed whereby individual archaeologists — who may not play a major part in decision-making regarding the financing, project management or retrieval of information — are the licence holders with responsibility for the direction of excavations on behalf of archaeological consultancy companies. The review should assess the potential benefits and perceived difficulties associated with the excavation director holding the licence and taking responsibility for the interpretation of results. In addition, the advantages and disadvantages of issuing licences to private archaeological consultancy companies, and not just to individuals as is the current practice, needs to be examined. Currently, work carried out on major road projects under ministerial direction (22) to local authorities/NRA is done in liaison with consultancies rather than with individual archaeologists.

Other key issues that need to be considered are: the publication of the work; the management of excavations; standards of practice in the excavation and post-excavation stages; access by researchers to the excavation archive; intellectual property rights; curatorship of the archive, artefacts and samples; and the licensing of approved conservators to work on archaeological material.

### *An Agreed Archaeological Grading System*

Archaeologists routinely make comparisons between and judgements about different monuments and sites. In mitigating the impact of development, known sites — as recorded in the Record of Monuments and Places — are avoided and assessments are made to identify and rank the significance of sub-surface features. Mitigation-stage archaeology already distinguishes the relative significance of such sites.

In this context, archaeologists are already *de facto* operating a grading system. What is urgently required is the clarification of those procedures that are in current practice, with a view to establishing how they might be more effectively used in:

- mitigating the impact of developments on archaeological features
- providing the basis for a more systematic application of protection measures designed to ensure that an appropriate number of monuments of the wide range of known types is fully protected.

In conservation management generally, and most notably in the planning process for developments, grading systems would be beneficial in avoiding some, but not all, of the politicisation and polarised debates that occur at the interface between archaeological conservation and infrastructural development. For this to happen, the grading systems would have to provide an acceptable and transparent methodology for making comparisons and reaching conclusions that are judged to be relatively objective and reputable by different interest groups. A report on monument grading systems was commissioned by the Heritage Council in 2003 (23). As detailed in that report, the significance of components of the architectural heritage in Ireland has, since 1990, been assessed according to their international, national, regional, local or other significance. Being largely above ground, the architectural heritage is clearly more amenable to grading than archaeological features. Nonetheless, comparable grading systems could be useful as methodologies/tools in archaeological resource management.

The establishment of formal grading systems for archaeological sites and monuments was seen to present formidable difficulties in a number of the Foresight submissions. Moreover, it would hardly be feasible unless a nationally agreed Archaeological Research Agenda had already been formulated. Given such circumstances, research design could be incorporated into the tendering procedures in development-led assessment and mitigation (Sections 2.3, page 30, and 3.1, page 45).

### *Continuing Professional Development*

The archaeological profession as a whole needs to establish a system which imposes self-regulated, measurable standards of practice and accreditation for archaeologists as the basis for professional conduct and development. Two important reports on the professional development of archaeologists have been commissioned by the Institute of Archaeologists of Ireland and the Heritage Council (4, 24).

The professional development programme currently being developed by the Institute of Archaeologists of Ireland proposes that practising archaeologists take education and training modules in a number of third-level institutions. This needs to be developed further, leading to postgraduate degrees in professional archaeological practice. Modularisation

and agreed educational pathways are crucial to the development of inter-university programmes. In this regard, the adoption of a common academic currency (the European Credit Transfer System provides such a standard) would enable cooperative teaching ventures to be extended to both postgraduate and undergraduate courses.

Public policy interventions in different sectors of the economy have enormous implications for the physical and cultural environment. The concerns of environmental sustainability are multifaceted, embracing a broad range of academic disciplines, as well as concerns that emanate from economic, social, legal and planning perspectives. However, the traditional educational and training background of many employed in a wide range of functions that impact on the natural and cultural environment often results in approaches to development that are unduly narrow and understandably conditioned by specific professional and educational backgrounds, perspectives and personal values.

Consequently, there is a growing need for a broader approach to the formative and continuing education of a range of executives and managers involved in projects relating to sustainable development. It would be of major benefit to both parts of Ireland if such a professional training programme could be developed, allowing leaders and managers to become familiar with policy developments and institutional operating procedures. A fuller understanding of the complexity involved in public decision-making would facilitate better communication and understanding among the different professions (such as planners, engineers, archaeologists and ecologists) concerned with attaining the optimum balance between development and conservation.

In conjunction with the Institute of Archaeologists of Ireland and other professional associations, the development and delivery of education and learning programmes would be best undertaken through a partnership of appropriate third-level and research organisations. Flexible delivery mechanisms (e.g. distance learning, weekend classes, video-conferencing and Internet discussion groups) would be used to enable participants to pursue the programme while continuing with their professional occupations.

Initial financial support to cover curriculum design, technical support and content development would be around €0.5million, including the costs of a number of scholarships for some of those undertaking the study programme.

### *Developing Public Awareness*

The increased attention being devoted to environmental studies in the education system, especially in the primary school curriculum, is of paramount importance in ensuring that future generations have a better appreciation of the environment, both natural and cultural. It is therefore incumbent on all the institutions with responsibility for archaeology to raise public appreciation and understanding of archaeology. The Institute of Archaeologists of Ireland, in conjunction with other organisations, should play a coordinating role in harnessing the opportunities provided by outreach and life-long learning programmes. These would include those already being provided by second and third-level institutions, museums, archaeological and historical societies, as well as by other community groups and heritage tourism bodies.

The proposed Bureau for Archaeological Publication (page 38) would make a major contribution to disseminating the outcomes of excavations to archaeologists and interest groups, such as local archaeological and historical societies and outreach education programmes.

There is a growing audience for well-informed TV programmes which deal with Irish archaeology and that are presented at a measured, easily assimilated pace which is suited to the general viewer. The benefits of developing a public education initiative – modelled perhaps along the lines of *Agri-Aware* and targeted at students, local authority officials, farmers, building contractors and other groups – should be investigated.

### *Comment*

These Strategic Support Initiatives are important in addressing the current systemic failures in Irish archaeology. Representing support systems for the proposed Overarching Enabling Measures, they are important proposals in their own right. However, to achieve the radical repositioning of Irish archaeology set out above, both Enabling Measures and Support Initiatives need to be put in place in a planned, coordinated manner. This will require good will and action from government, all sectors of the archaeological profession, and other relevant stakeholders. This report is the first step in that process.





*Early Bronze Age burial (2400-1800 BC) of an adult female accompanied by a bowl food vessel pot uncovered at Harlockstown, Co. Meath, on the route of the N2 Finglas-Ashbourne road scheme [CRDS Ltd]*



If it is to be repositioned in the knowledge society, archaeology in 2020 must be characterised by organisational and directional coherence which is driven by knowledge creation, communication and dissemination.

Archaeology in Ireland has changed radically due the exponential growth in development-led archaeology since the early 1990s. A number of systemic failures characterise archaeology today. Chief among these are:

- Lack of a coherent structure and strategic direction setting out the role of central government in the regulation and management of archaeology
- Disconnectivity between development-led archaeology and research priorities and perspectives
- Accumulation of an unsustainable backlog of unpublished excavation reports
- Failure to create knowledge from the massive volume of information generated by development-led archaeology and other excavations
- An impending crisis in relation to the curation and archiving of excavation data and artefacts

To address these systemic failures, the timely and effective implementation of the measures and initiatives outlined in Section 3 (page 38) of this Foresight Report is essential. In particular, the three *Overarching Enabling Measures* detailed in Section 3.1 (page 38) are an absolute imperative. These are the establishment of an

- Archaeological Implementation Partnership
- Bureau for Archaeological Publication
- Inter-Institutional Collaborative Funding System

Unless there is a sizeable and sustained commitment of resources to the proper implementation of these Overarching Enabling Measures, in conjunction with the Important Strategic Support Initiatives outlined in Section 3.2, the 2020 perspective and aim of repositioning Irish archaeology in the knowledge society (Section 2.4, page 34) will not be achieved. Instead, archaeology in Ireland will continue to be beset by the persistent systemic failures highlighted in Section 2.2 (page 22). Irish archaeology will ultimately be placed in a virtually intractable position.

To achieve the implementation of the Overarching Enabling Measures, significant coordination in archaeological research will rely crucially on the presence of one of these measures – the Inter-Institutional Collaborative Research Funding System. Such research funding already exists in some nationally targeted areas of scientific research, such as food and the environment. An equivalent funding system to stimulate archaeological research should be provided under the National Development Plan 2007-2012. A funding system is essential in achieving the real, durable cooperation necessary to create partnership, tackle the publication backlog and generate the critical mass of expertise required to produce the maximum knowledge from our archaeological resources.



*The view eastward from the entrance to Benagh inland promontory fort, Co. Kerry. The site is located on top of a small promontory or spur on a peak to the north-east of Mount Brandon. The view is of the north side of the Dingle Peninsula towards Slieve Mish [Aegis Archaeology Ltd]*

## REFERENCES

1. *Ireland: National Development Plan 2000 – 2006*, Government Stationery Office, Dublin, 1999.
2. *The Future Demand for Archaeologists in Ireland: A report to the Heritage Council and the Institute of Archaeologists of Ireland* (CHL Consulting, 2002).
3. *Excavations 2003: Summary Accounts of Archaeological Excavations in Ireland*, I. Bennett (ed.). Wordwell. Bray, 2004.
4. *A Profile of the Archaeological Profession and Educational Resources in Ireland: A report to the Heritage Council and the Institute of Archaeologists of Ireland* (CHL Consulting, 2002).
5. *National Spatial Strategy for Ireland: People, Places and Potential*, Government Stationery Office, Dublin, 2002.
6. *Rural Ireland 2025: Foresight Perspectives*. NUI Maynooth, University College Dublin and Teagasc. Dublin, 2005.
7. *Rural Environmental Protection Scheme: Farmer's Handbook for REPS 3*, Department of Agriculture and Food, no date.
8. *AgriVision 2015: Final Report*. Department of Agriculture and Food. Dublin, 2006.
9. *Unpublished Excavations in the Republic of Ireland*, Doyle, I.W., Jennings, D., MacDermott, J, with Challinor, D. & Lambrick, G. The Heritage Council, Kilkenny, 2002.
10. *Climate Change: Impacts and Scenarios for Ireland*. Sweeney, J. *et al.*, Environmental Protection Agency, Wexford, 2003.
11. *Recent Archaeological Discoveries on National Road Schemes 2004: Archaeology and the National Roads Authority Monograph Series*, 2, J. O'Sullivan & Stanley, M. (eds), National Roads Authority, Dublin, 2005.
12. *Doctoral Programmes for the European Knowledge Society*, European Universities Association. Brussels, 2005.
13. *Reform of 3rd Level and Creation of 4th Level Ireland: Securing Competitive Advantage in the 21st Century*, Irish Universities Association, Dublin, 2005.

14. *The Containment of Heritage: Setting Limits to the Growth of Heritage in Ireland*. Cooke, P. The Policy Institute, TCD, Dublin, 2003.
15. *A Policy Framework for the Irish Museum Sector*, The Heritage Council, Kilkenny, 2003.
16. *Archaeological Features at Risk Project: A survey measuring the recent destruction of Ireland's archaeological heritage*, O'Sullivan, M., O'Connor, D.J. and Kennedy, L. The Heritage Council, Kilkenny, 2001.
17. *The Condition and Management Survey of the Archaeological Resource, Northern Ireland*. Gormley, S., Foley, C., Hartwell, B., Donnelly, C., and Bell, J. Unpublished Report (2006) held by QUB and EHS.
18. *The Monuments at Risk Survey of England 1995*, Darvill, T. and Fulton, A., English Heritage and Bournemouth University, London, 1998.
19. 'The Archaeological Landscapes Project: an approach to cultural landscapes', Cooney, G., Condit, T., & Byrnes, E. In *Europe's Cultural Landscape: Archaeologists and the Management of Change*, (eds) Fairclough, G., Rippon, S. & Bull, D, Europae Archaeologiae Consilium, 39-48, Brussels, 2002.
20. *The Archaeological Landscapes Report, second stage report*, December 2004, G. Cooney, Unpublished report for The Heritage Council, 2004.
21. *Using Historic Landscape Characterisation*, Clark, J. Darlington, J. and Fairclough, G. English Heritage and Lancashire County Council, London, 2004.
22. *National Monuments (Amendment) Act 2004*. Government Stationery Office. Dublin, 2004.
23. *A Study of Monument Grading in the Republic of Ireland*, Sharma, B., Wait, G. and Darvill, T., unpublished report by Fehily Timoney Gifford for the Heritage Council, 2003.
24. *Towards a continuing professional development (CPD) framework for archaeologists in Ireland*, Deane, C, unpublished report by Options Consulting for the Institute of Archaeologists of Ireland, 2005.



## PARTICIPANTS IN THE FORESIGHT CONSULTATIVE FORUM

Mr Emmet Byrnes, Archaeologist, Forest Service, Department of Agriculture and Food, Dublin

Mr Paul Connolly, Heritage and Planning Division, Department of the Environment, Heritage and Local Government, Dublin

Professor Gabriel Cooney, UCD School of Archaeology, University College Dublin

Mr Chris Corlett, Honorary General Secretary, Royal Society of Antiquaries of Ireland, Dublin

Mr Kevin Cullen, Director, Heritage and Planning Division, Department of the Environment, Heritage and Local Government, Dublin

Dr Colm Donnelly, School of Geography, Archaeology and Palaeoecology, Queen's University Belfast

Dr Liam Downey, Honorary Research Fellow, UCD School of Archaeology, University College Dublin

Mr Ian Doyle, Archaeological Officer, The Heritage Council, Kilkenny

Mr Brian Duffy, Chief Archaeologist, Heritage and Planning Division, Department of the Environment, Heritage and Local Government, Dublin

Mr Michael Egan, Head of Corporate Affairs, National Roads Authority, Dublin

Ms Margaret Gowen, CEO, Margaret Gowen and Co., Dublin

Mr Eoin Halpin, Chairperson, Insitute of Archaeologists of Ireland

Mr Maurice Hurley, Independent Archaeologist (formerly City Archaeologist, Cork), Cork

Mr Eamonn P. Kelly, Keeper of Irish Antiquities, National Museum of Ireland, Dublin

Dr Brian Lacey, Chief Executive, The Discovery Programme, Dublin

Mr John McCullen, Agri-Aware (IFA); Former President of the County Louth Archaeological and Historical Society

Mr Mick Monk, Department of Archaeology, University College Cork

Dr Charles Mount, Archaeologist, Irish Concrete Federation, Dublin

Mr Ragnall Ó Floinn, Head of Collections, National Museum of Ireland, Dublin

Ms Dáire O'Rourke, Senior Archaeologist, National Roads Authority, Dublin

Dr Muiris O'Sullivan, Head, UCD School of Archaeology, University College Dublin

Professor Barry Raftery, UCD School of Archaeology, University College Dublin

Dr Michael Ryan, Director, Chester Beatty Library; Chairperson, The Discovery Programme, Dublin

Mr Michael Starrett, Chief Executive, The Heritage Council, Kilkenny

Dr Elizabeth Shee Twohig, Department of Archaeology, University College, Cork

Mr Martin Whelan, Spatial Planner, Construction Industry Federation, Dublin

Dr Brian Williams, Principal Inspector (Acting), Environment and Heritage Service, Department of the Environment Northern Ireland, Belfast

Professor Peter Woodman, Head, Department of Archaeology, University College Cork

Mr Donal Wynne, Bord na Móna, Tullamore



## SUBMISSIONS RECEIVED IN RESPONSE TO THE DRAFT FORESIGHT REPORT

Department of Agriculture and Food, Dublin

Environment and Heritage Service, Department of the Environment Northern Ireland, Belfast

The Heritage Council, Kilkenny

Historic Monuments Council, Northern Ireland, Belfast

The Institute of Archaeologists of Ireland, Dublin

The Institute of Professional Conservators and Restorers Association, Dublin

National Monuments Section, Department of the Environment, Heritage and Local Government, Dublin

The Royal Irish Academy Committee for Archaeology, Dublin

Dr Stefan Bergh, Department of Archaeology, National University of Ireland, Galway

Mr Emmet Byrnes, Forest Service, Department of Agriculture and Food, Dublin

Mr Gerry Clabby, Heritage Officer, Fingal County Council, Dublin

Mr Pat Cooke, Curator, Kilmainham Gaol and St Enda's, Office of Public Works, Dublin

Mr James Eogan, National Roads Authority, Tramore, Co. Waterford

Ms Clare Foley, Environment and Heritage Service, Department of the Environment Northern Ireland, Belfast

Mr Michael Gibbons, Archaeologist, Clifden, Co. Galway



Dr Ann Lynch, Senior Archaeologist, National Monuments Section, Department of the Environment, Heritage and Local Government

Ms Sinéad McCartan, Curator of Prehistoric Antiquities, National Museums and Galleries of Northern Ireland, Ulster Museum, Belfast

Ms Congella McGuire, Heritage Officer, Clare County Council, Ennis

Ms Finola O'Carroll, CRDS company director, Meath Office, Greenanstown, Co. Meath

Mr Coilin O'Drisceoil, Archaeologist, Thomastown, Kilkenny

Ms Dáire O'Rourke, Senior Archaeologist, The National Roads Authority, Dublin

Mr Matthew Seaver, CRDS, Meath Office, Greenanstown, Co. Meath

Mr Richard Warner, Keeper of Antiquities, Ulster Museum, Belfast

Following the completion of the report, a submission was received from the Co. Meath Archaeological and Historical Society.

SUPPORTED BY THE HERITAGE COUNCIL



LE CUIDIÚ AN CHOMHAIRLE OIDHREACHTA

