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## **Condition and Management Survey of the Archaeological Resource in Northern Ireland (CAMSAR)**

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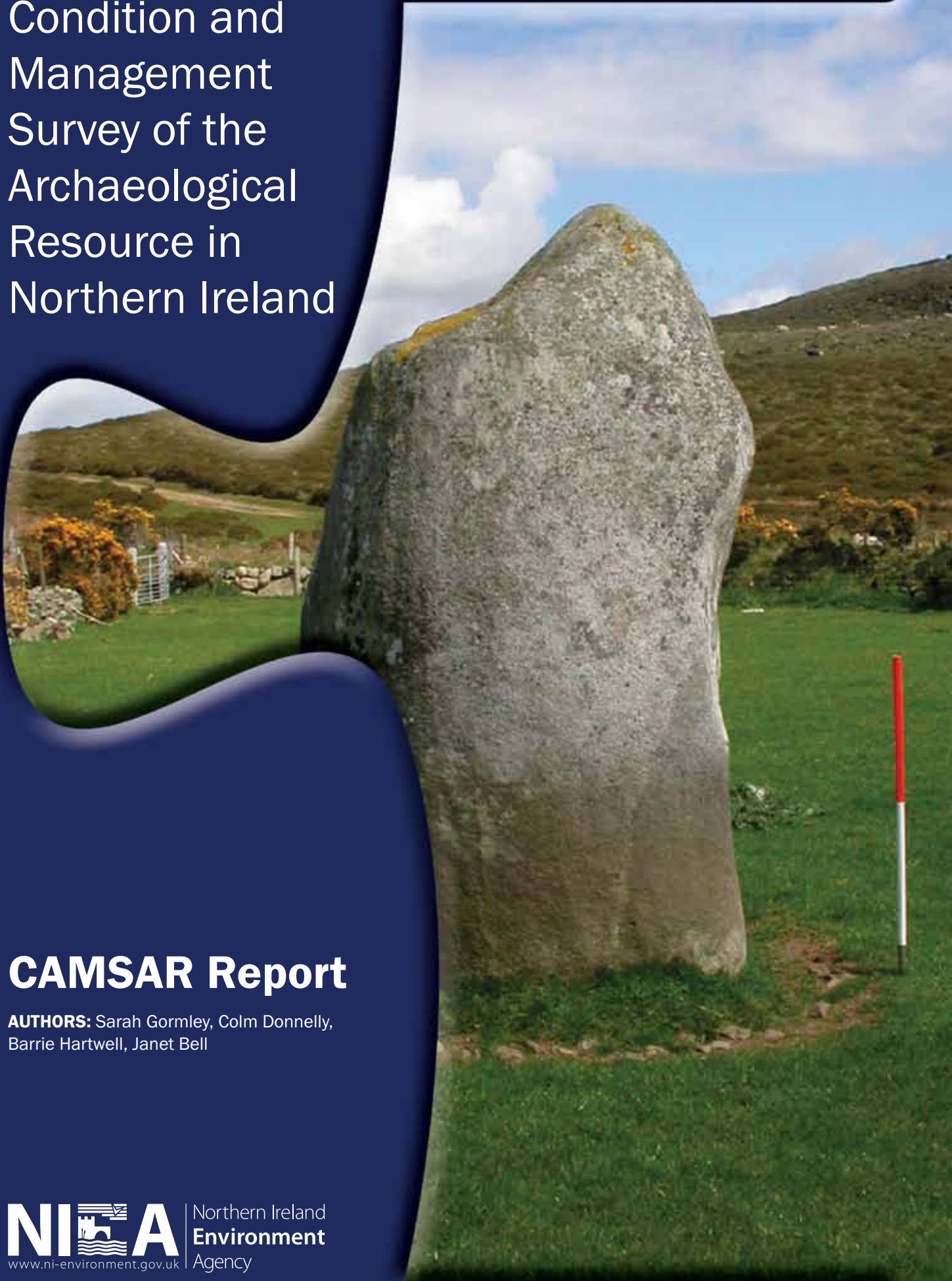
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# Condition and Management Survey of the Archaeological Resource in Northern Ireland

## CAMSAR Report

**AUTHORS:** Sarah Gormley, Colm Donnelly, Barrie Hartwell, Janet Bell





A report commissioned by the Northern Ireland Environment Agency  
(formerly Environment and Heritage Service)

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Authors: Sarah Gormley, Colm Donnelly, Barrie Hartwell, Janet Bell

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## FOREWORD

The archaeological resource of sites and monuments within the historic landscape has been handed down the generations for thousands of years. As part of the wider European landscape it is valued as a link with our past providing unique interest and character to Northern Ireland. If future generations are to have an archaeological heritage to enjoy and understand, then we need to ensure that it is protected and managed appropriately and that everyone plays their part. The importance of retaining such ancient places is equally relevant to the academic study of these sites as to the visitor looking for a place of interest to see on a day out. Those who are involved in day-to-day management of the landscape, mostly farmers, foresters and their contractors, need to have the knowledge, skills and support to help them to manage archaeological sites appropriately. Government bodies, particularly NIEA, already play their part, from the better regulation of environmental practices to provision of advisory literature and accessible, practical support. The Department of Agriculture and Rural Development (DARD) in particular plays an important role in this work as champion of Good Farming Practice and with influential contact with landowners.

The gathering of data in the CAMSAR study has established a statistical baseline against which future trends can be measured. It has identified both good and bad aspects of the present condition and management of our archaeological resource. Given the general interest encountered during the survey from most landowners and farmers about ancient sites and monuments located on their land, and their generally positive attitude towards this resource, the future looks reasonably good. However, changes in land management and ownership in the future will impact on the treatment of these sites and agents tasked with their care will need to remain vigilant. We hope that future CAMSAR surveys will be able to report on improved trends and reflect a more widespread appreciation and care for the archaeological sites which remain in our wider historic environment.

**Michael D A Coulter**  
**Director, Built Heritage**



## **ACKNOWLEDGEMENTS**

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## SUMMARY OF FINDINGS

This Condition and Management Survey of the Archaeological Resource Northern Ireland (CAMSAR) was conducted in 2004 and 2005, with some minor revision in 2007. It set out to study the current survival and condition of sites and monuments in Northern Ireland. Specifically, it focused on sites and monuments earlier than 1700 AD as recorded in the Northern Ireland Sites and Monuments Record, a resource maintained by the Built Heritage Directorate of the Northern Ireland Environment Agency (formally the Environment and Heritage Service), an agency within the Department of the Environment in Northern Ireland.

A total of 1500 sites, approximately 10% of the known total at that time, were selected at random from the Northern Ireland Sites and Monuments Record, and were inspected in the field using a methodology tested in an earlier pilot survey undertaken between 2001 and 2002<sup>1</sup>.

This was a detailed and often complex research project, and the summary of the key findings have been highlighted below as overall results of the research. Further detail on the condition and management of these sites is presented within the main report.

The findings noted below provide for the first time a scientifically-based analysis of the condition of archaeological sites in Northern Ireland. It is based upon reliable data, not supposition or speculation, and can be used as a 'bench-mark' against which future analysis and management strategies can be developed.

### KEY FINDINGS

Only 7% of the archaeological sites and monuments in the sample were found to be 100% complete or substantially complete.

Sites and monuments located on arable, improved grassland and within urban areas have the worst rates of survival, and are in the poorest condition.

Sites and monuments located on unimproved grassland, within woodland and within wetlands generally survive well and are preserved in a fair, good or excellent condition.

Over 90% of the sites and monuments that have been specially protected through State Care, Scheduling, or Agri-environment agreement can be shown to have survived well.

It was demonstrated that uncontrolled new, built development and certain agricultural activities, particularly heavy grazing and the practice of improving grassland, are the most destructive factors affecting the archaeological resource in Northern Ireland.

A full break-down of the analysis of this statistical survey is provided at Appendix 1 of this report. Key recommendations are made at Section 9 of the main text.

The following is given as an overall summary of the findings of this survey:

### SURVIVAL

56% of the sample sites were found to have at least some upstanding remains, while 44% had no upstanding visible remains.



## **CONDITION**

The condition of each site was recorded at the time it was inspected for this research. While over half of the sample was assessed to be in fair to excellent condition, only 4% could be described as good or excellent. 44% had no upstanding visible remains on which an assessment of their condition could be made.

## **LAND USE AND SURVIVAL**

The land use at each of the sites and monuments visited was recorded against a set of ten general categories, reduced from the overall 50 in the Sites and Monuments Record (see appendix 3), of which the most common were improved grassland (34%), built development (17%), woodland (13%) and wetland (12%). The survival of sites in each of these ten general categories of land use was examined to assess which had the worst and best survival rates.

It was found that the worst survival rates for archaeological sites and monuments were on areas of arable land, improved grassland and areas of built development. Sites and monuments in unimproved grassland, woodland and within field boundaries survived best.

## **LAND USE AND CONDITION**

The condition of sites varied within the different land use categories. In general, monuments located in areas of arable land, improved grassland and built development were in worse condition than those found in other categories. These are the same land use areas which have lower survival rates of archaeological sites and monuments.

## **STRUCTURAL TYPE AND SURVIVAL**

In general it was found that monuments constructed of stone – either as bonded masonry, dry-stone structures, standing stones or carved stone – had higher survival rates than those constructed of earth or organic material (such as wood).

## **PROTECTION**

A total of 16% of the sample sites visited were statutorily protected as State Care or Scheduled Historic Monuments under the provisions of the Historic Monuments and Archaeological Objects (NI) Order 1995. A further 5% were protected under time-bound provisions of Agri-environment management agreements

## **PROTECTION AND SURVIVAL**

Some 70% of the statutorily protected sites surveyed were found to be complete or substantially intact, with a further 20% identifiable to some degree on the ground. Below ground remains with no upstanding features are often scheduled in their own right to protect buried remains.

## **PROTECTION AND CONDITION**

Some 93% of the protected sites were found to be in fair, good or excellent condition.

## **PAST DAMAGE**

59% of sites visited were found to have been damaged to varying degrees in the past, that is, as far as could be judged, more than five years before the survey commenced. Deliberate removal, whether by built development or agricultural activity, accounted for over half of all these cases.

## **RECENT DAMAGE**

26.5% of the overall number of sites surveyed were found to have been damaged within the previous five years. Of the sites that were found to have survived with complete, substantial or some definable remains a much higher proportion, some 48% of those sites, had been damaged during that period. Livestock and cultivation accounted for most of the damage, while wildlife (rabbits, badgers etc) and overgrowth were also significant factors.

## **PROTECTION AND RECENT DAMAGE**

47% of the protected sites had been damaged recently, with livestock causing the greatest damage (in 23% of cases) and scrub or overgrowth encroachment was found to be damaging 19% of protected sites.

## **LAND USE AND RECENT DAMAGE**

It is recognised that upstanding monuments or well-preserved remains are more likely to suffer the effects of recent damage. As upstanding elements of the landscape, they are therefore more prone to being trampled, eroded or otherwise damaged. This is not to say that levelled sites are invulnerable: a single episode of deep ploughing or topsoil stripping may irrevocably damage a buried archaeological site. Damage within the previous five years was most obvious in areas of woodland, arable land, and unimproved grassland.

## **STRUCTURAL TYPE AND RECENT DAMAGE**

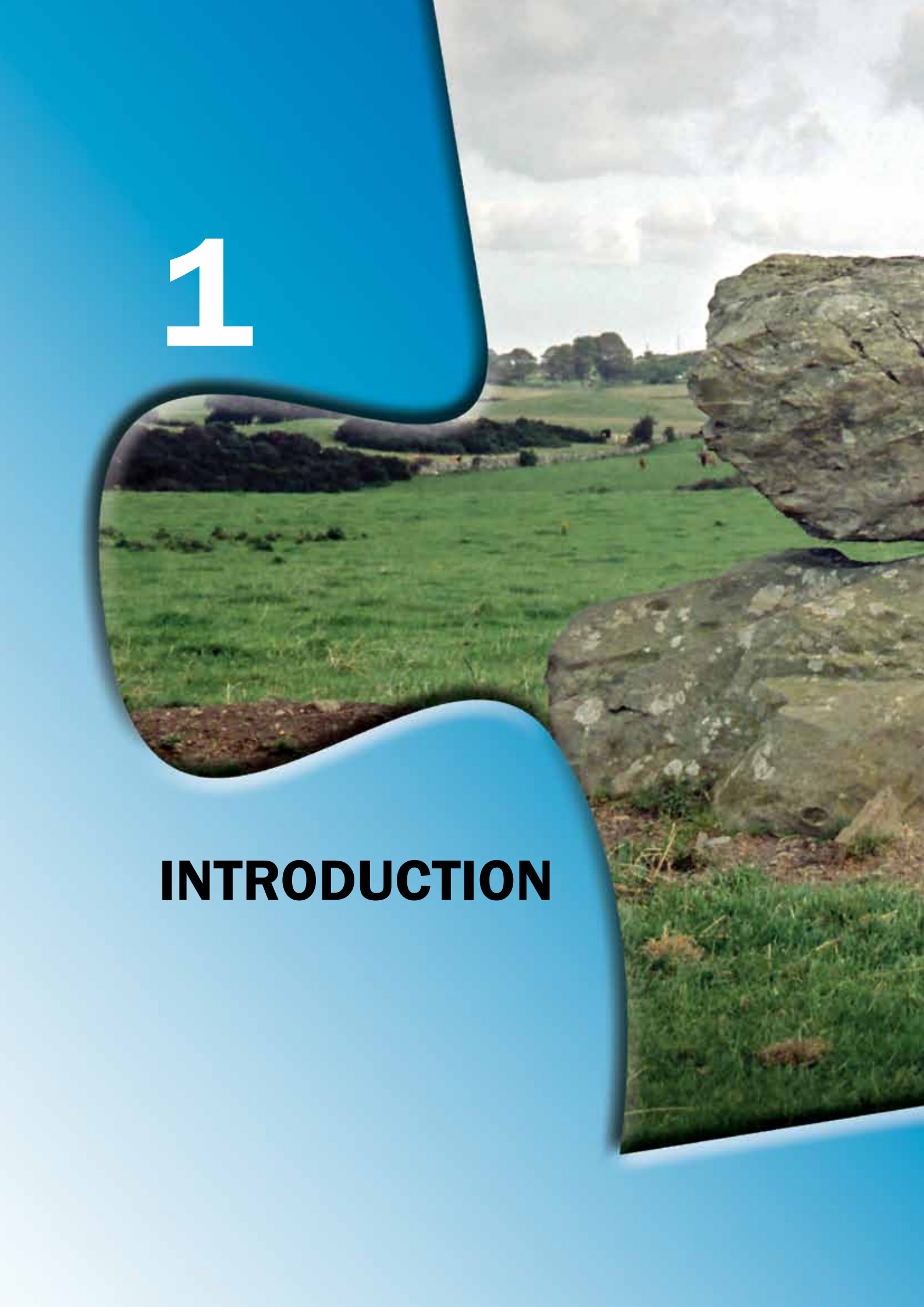
The material from which an archaeological site is composed will determine how robust it is in resisting damage. Earthworks, upright standing stones (orthostatic monuments) and mounds were more commonly found to have been damaged in the previous five years

## **References**

1 Gormley *et al.* 2002

**1**

**INTRODUCTION**







## INTRODUCTION

In Northern Ireland, the Northern Ireland Environment Agency (NIEA) is the lead statutory authority concerned with the protection, management and regulation of the built heritage. NIEA maintains a central archive of information about the built heritage, including archaeological sites, within its Monuments and Buildings Record (MBR). The Northern Ireland Sites and Monuments Record (NISMR) is the core archive of the MBR. The Condition and Management Survey of the Archaeological Resource (CAMSAR) was commissioned to collect data on a statistical selection of sites and monuments in Northern Ireland, to make an accurate assessment of their survival and condition and of the factors affecting their preservation. The survey was intended to provide heritage practitioners and land management policy makers with information on which to base decisions regarding the protection and conservation of these sites and to consider the resources required to do this.

The Northern Ireland Sites and Monuments Record (NISMR) contains records on over 16,000<sup>2</sup> sites and monuments ranging in date from the Mesolithic period, over 9,000 years ago, to the Post-Medieval and modern periods. This resource is diverse in composition, from shell-middens and artefact find-spots, to megalithic tombs, medieval castles, and churches of all periods. Many sites are visible above ground and form integral parts of the landscape, whilst others have been levelled and evidence of their existence survives only below the present surface. They are located throughout the countryside, on mountains and uplands, on the pastures of the lowlands and along coastlines, as well as in towns and cities. The sample of the archaeological resource assessed in this survey included all types of sites and monuments up to AD 1700.

Archaeological field monuments are a finite, non-renewable resource. Each is a unique repository of information. Damage to or loss of this resource is irreversible and permanent. Nonetheless it has come under increasing pressure in recent years, competing in the landscape against the interests of intensive farming practices and the development of the urban landscape. It is important that the archaeological resource is protected through times of change, to ensure the long-term survival of as many sites and monuments and their landscapes as possible. They are not only landscape features contributing to the variety and character of the countryside, bound up in many cases with local folklore and tradition but also repositories of both archaeological and scientific information.

This report contains the results of the survey. The initial sections introduce the project and the principles behind the study, and set out in detail its aims and objectives. The methodology of the project is then explained and the concluding sections provide a discussion of the results.

### References

2 Data recorded in 2004

2



**PROJECT  
OBJECTIVES**







## 2 PROJECT OBJECTIVES

From the outset it was planned that CAMSAR would address a number of issues, with particular attention being paid to the following specific objectives:

- To assess the current survival of a 10% sample of monuments drawn from the Northern Ireland Sites and Monuments Record (as of 2004),
- To assess the current condition of the sample and the factors affecting the sites,
- To detail the effects of the various types of land use on the survival and condition of monuments,
- To assess the effectiveness of current NIEA management and protection strategies for State Care and Scheduled Monuments and
- To make recommendations for the improvement of the management of sites and monuments in Northern Ireland.

These targets were to be achieved by:

- gathering NISMR information held on the sample of sites and monuments,
- visiting these sites and recording their current survival and condition using a specially designed, comparative pro forma, and
- performing statistical analysis to identify the factors affecting the preservation of sites and monuments



**3**

**BACKGROUND TO  
THE PROJECT**





### 3 BACKGROUND TO THE PROJECT

The CAMSAR project arose from a growing recognition in recent decades of the need for detailed assessment of the overall condition and survival of archaeological sites and monuments in Northern Ireland. This grew from a perception that the damage being caused to archaeological sites was increasing, and that there was a need to quantify the effects of farming and development practices as well as greater urbanisation. The preservation and conservation of archaeological sites and unique landscapes in the face of economic change has become an increasing priority internationally, particularly in Europe. In this context, CAMSAR was established to identify the issues affecting the archaeological sites and monuments of Northern Ireland in order to make decisions about better regulation, training, partnerships and community involvement.

#### 3.1 DAMAGE AND DESTRUCTION: PREVIOUS ASSESSMENT OF THE ARCHAEOLOGICAL RESOURCE IN BRITAIN AND IRELAND

In recent decades throughout the UK and Ireland there has been increasing concern about regular damage and destruction of archaeological sites and monuments. Media reports have highlighted the threats to archaeological monuments with worrying headlines such as ‘Experts fear for future of ancient burial site’ and ‘Concern at ploughing threat to ancient sites’<sup>3</sup>. The issue has also been flagged repeatedly by archaeologists. It was claimed over 50 years ago that “... the initiation of large-scale schemes of land-improvement ...has resulted in the destruction of field antiquities [historic monuments] on a scale which is unprecedented in the history of the country”<sup>4</sup>. This claim has often been repeated, with an account in 2002 that “... the archaeological resource is coming under greater threat in Ireland today than at any other time in History”<sup>5</sup>.

In response to this threat, a number of studies have been carried out elsewhere in an attempt to measure and quantify this ‘destruction’. For the most part, such research has taken the form of small-scale surveys examining damage type, or studies specific to regions or monument types. The effects of particular types of damage, including those caused by burrowing animals, forestry and agriculture, have been considered<sup>6</sup>, and destruction rates of individual monument types have been published<sup>7</sup>. The results from these studies have served to support assertions that not only are sites and monuments being damaged, but they are also being lost. A study of ringforts in County Wexford, for example, suggested that by 1981 some 72% had been levelled, and that a further 6% had been considerably modified<sup>8</sup>. These figures indicate that a significant element of the archaeological resource in that county had already been lost by the early 1980s. However, the suggested figures for the destruction of ringforts elsewhere are not quite so alarming, with a figure of around 39% suggested for County Louth<sup>9</sup>.

Regional studies in Wales have been undertaken, including one which dealt solely with Scheduled Monuments, based on reports from field monument wardens. The results showed that since being scheduled 38% of sites had deteriorated slightly, 8% showed serious deterioration, and that 1% had lost all upstanding remains. It was found also that agricultural activities including erosion caused by livestock accounted for 44% of this damage<sup>10</sup>.

For Northern Ireland, a desk-based survey of monument destruction drawing on the information contained on the first edition Ordnance Survey six-inch map sheets (dating to the 1830s) suggested that by the late 1970s about 50% of sites had been destroyed at least above ground in southern County Antrim and all of Armagh, compared with a much smaller figure of 10% of sites known to have been lost in County Fermanagh<sup>11</sup>. Small-scale field studies in Northern Ireland have also shown high levels of damage to archaeological monuments, with 51% of sites surveyed in two environmentally sensitive areas showing signs of recent damage, with that caused by livestock highlighted as of particular concern<sup>12</sup>.

Reports such as those noted above indicate that there has already been significant damage caused to the archaeological resource. In many cases this has resulted in the complete destruction of individual sites and monuments. It became evident that levels of damage needed to be accurately assessed on a wider scale, through studies that encompassed a full range of monuments and land classes of all types. This was required to allow effective debate about how to address the causes of such destruction, and led to two projects being carried out at a national level to assess, measure and record exactly what damage, and how much loss, had been sustained in order to better inform policy. The *Monuments at Risk Survey* in England (MARS) was completed in 1996, and the *Archaeological Features at Risk Project* (AFAR) in the Republic of Ireland in 1998. Both surveys addressed the concerns raised over large-scale damage to, and loss of monuments by gathering information on a sample of sites. They also attempted to measure changes over time, highlighting the causes of these changes.

The MARS project<sup>13</sup> aimed to provide a systematic quantification of the sites and monuments of England, including the scale and rate of damage to monuments since 1945. The methodology adopted involved analysis of the recorded resource held by the local Sites and Monuments Records (SMRs) and a detailed examination of a sample of that record through fieldwork and aerial photography<sup>14</sup>. The report identified the causes of damage, assessed present condition and survival, and discussed the effectiveness of the current management measures. Establishing the nature and extent of the recorded resource was much more problematic for England than was subsequently found to be the case in Northern Ireland. In England there was no centralised archaeological record as we have in Northern Ireland, with English Sites and Monuments Records (SMRs) having been developed in a series of county, city or district catalogues<sup>15</sup>. During the English project, field survey data was logged relating to land use, the scale and extent of damage, survival, risk, accessibility and visibility at a total of 13,488 monuments located in 1297 separate, sample land transects (1km by 5km in extent)<sup>16</sup>. It was found that 16% of monuments had been wholly destroyed prior to 1995, with about half of this destruction having occurred since 1945<sup>17</sup>. Cultivation was found to be the single biggest hazard, accounting for 10% of complete loss and 30% of piecemeal loss, with development and urbanisation identified as the single greatest cause of complete loss overall<sup>18</sup>.

In the Republic of Ireland the AFAR project, supported by the Heritage Council, aimed specifically at establishing the rate of loss of sites and monuments in selected regions since the completion of the relevant county archaeological inventories and/or surveys, to examine the condition of the

record, and the level of risk currently posed to known monuments<sup>19</sup>. The study concentrated on a sample of monuments in selected study areas (in counties Cavan, Cork, Donegal, Galway, Kerry, Laois, Meath, Offaly and Wexford), with 1400 sites representing 1.4% of the total known number in the country. Monuments recorded as destroyed in the county archaeological inventories (407 in total) were not visited, and 101 sites could not be located<sup>20</sup>. Of the 892 visited, it was found that 8% had been destroyed since the completion of the county archaeological inventories<sup>21</sup>. Land improvement had caused the greatest issue with archaeological monuments, and was cited in over 50% of cases of damage or destruction<sup>22</sup>.

The results obtained from the *AFAR* project confirmed that archaeological sites and monuments in Ireland are under considerable threat<sup>23</sup>. To tackle the problem the Heritage Council is continuing its programme of survey work, and has initiated a research project looking specifically at the management of earthworks, with the aim of producing best practice guidelines for landowners of this structural type<sup>24</sup>. The Heritage Council has also recognised the important role which could be played by agri-environment schemes and is currently investigating how sites and monuments could be best protected within these schemes<sup>25</sup>.

### **3.2 THE DEVELOPMENT OF CAMSAR**

The CAMSAR project was developed in Northern Ireland against the backdrop of demonstrated levels of damage and loss in both England and Ireland. Also at this time agricultural policies in the European Union, partly prompted by the cost of surplus food storage, had developed an understanding of the importance of protecting landscapes, including their cultural components. This was reflected in a shift in agricultural subsidies away from production-oriented schemes that had adversely impacted upon the natural and built heritage. This was an important turning point for the sustainability of the countryside and it has led in Northern Ireland and elsewhere to the introduction of various agricultural support measures to assist farmers in maintaining and enhancing the environment. Archaeological monuments are recognised as 'habitats' within these support systems and are protected by Department of Agriculture and Rural Development policy in Northern Ireland.

The results gathered on the condition of archaeological sites in England and Ireland could not be directly applied to Northern Ireland, as the protection and management of monuments here is governed by separate local legislation and implemented using different systems to the rest of the United Kingdom and Ireland<sup>26</sup>. It should also be noted that the types of archaeological sites and monuments located in England, and their cultural associations are often significantly different from those found in Northern Ireland (for example, England has a much longer period of known human settlement than Northern Ireland, and at one time was fully part of the Roman Empire). The condition and survival of built heritage in Northern Ireland is also largely dependant on local land use practices and public attitudes prevalent here.

Data specific to the built heritage of Northern Ireland had to be collected in a systematic way in order to inform the management policies of NIEA and other bodies whose work affects the archaeological resource. A pilot scheme (CAMSAR, Pilot Project) was launched in 2000 to test the viability of



conducting a more general assessment<sup>27</sup>. The pilot project was undertaken by the School of Archaeology and Palaeoecology at Queen's University Belfast and its progress was delayed for a year by an outbreak of foot and mouth disease. A randomly-selected sample of 200 sites in north Antrim was drawn from the Northern Ireland Sites and Monuments Record and visited in the field. A pro forma was devised to record various aspects of the condition and survival of each of the monuments compared with various land uses. This pilot project was used to develop a successful methodology that could then be employed to survey and assess the condition and management of sites and monuments across Northern Ireland.

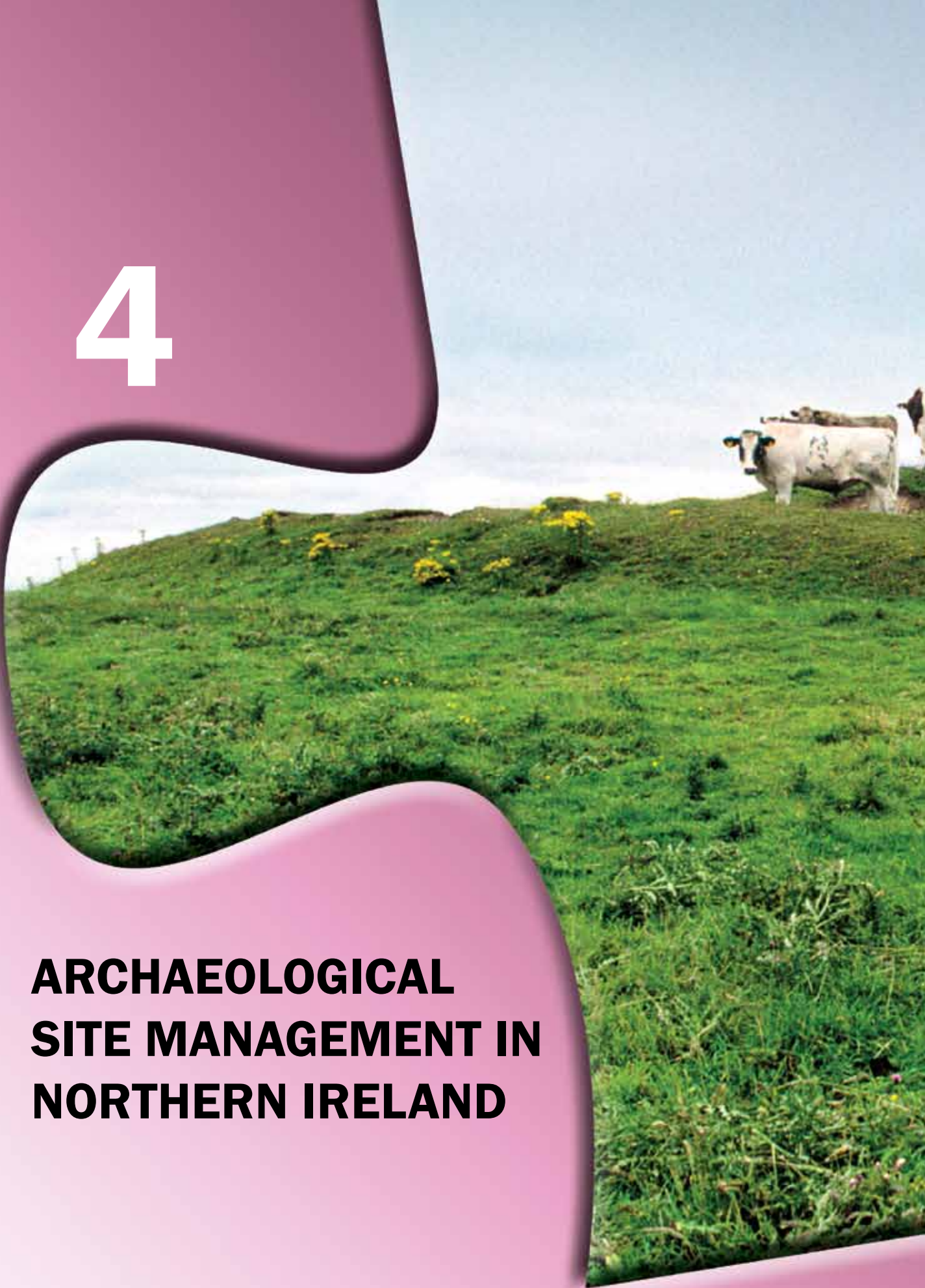
In 2003 the Centre for Archaeological Fieldwork (CAF) at Queen's University Belfast successfully tendered for this project in an EU-wide competition, and work commenced on CAMSAR in early 2004.

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- 7 Bennett 1989, 53
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4

**ARCHAEOLOGICAL  
SITE MANAGEMENT IN  
NORTHERN IRELAND**







## **4 ARCHAEOLOGICAL SITE MANAGEMENT IN NORTHERN IRELAND**

### **4.1 ARCHAEOLOGICAL SITES AND MONUMENTS**

Archaeological sites and monuments in Northern Ireland are recorded in the Northern Ireland Sites and Monuments Record (NISMR), part of the overall Monuments and Buildings Record (MBR) and are archived and managed by the NIEA. The NISMR currently contains information on over 16,000 sites<sup>28</sup>. Many different types of sites are represented, including artefact findspots, earthworks, megalithic tombs, churches and castles. The NISMR contains the results of over 70 years of professional and amateur data gathering, and the number of sites recorded has risen - and continues to rise - steadily each year as new discoveries are made.

The Built Heritage Directorate of NIEA compiles and maintains the NISMR, which can be accessed at [www.ni-environment.gov.uk/nismrsearch](http://www.ni-environment.gov.uk/nismrsearch), and also at the Pat Collins Reading Room in the NIEA: Built Heritage offices at Waterman House, 5-33 Hill Street, in Belfast. The original paper-based record, which has since been enhanced by an electronic database, was initially compiled from information contained on the 19th and 20th century Ordnance Survey six-inch maps, the Ordnance Survey Memoirs and other historical and written material from a wide range of other sources that stretch back as far as the 17th century. It is supplemented by photographs and drawings, place-name information, aerial photographs, measured descriptions obtained during field survey, excavation reports and regular new entries.

The NISMR records information on the type of land use at individual sites, any past damage, and previous details of mapped information. The level of information in each site description varies, depending on the nature and extent of the site. Reports also reflect individual writing styles and the preferences of the archaeologist in the field. In most cases the description includes a narrative about the physical remains, with some discussion of the likely site-type and date, along with general dimensions. The topographical situation in the landscape and relationships of sites to boundaries and other archaeological features is also often recorded. Occasionally information is recorded relating to management issues and past and present damage or threat.

In the wider Monuments and Buildings Record (MBR), NIEA also holds data on a number of other aspects of the historic environment. For example, the MBR contains information on c.9000 historic buildings, many of which are statutorily protected as Listed Buildings under the provisions of the Planning (NI) Order 1991. These records include information on dwellings, schools, and bridges, as well as churches and civic buildings. The MBR contains the Northern Ireland Industrial Heritage Record with over 18,000 records of sites of industrial interest. Also included in the MBR is the Heritage Gardens Inventory, containing records of nearly 700 gardens, parks and demesnes of historic interest. The Maritime Record contains information on shipwrecks and inter-tidal sites from around the coastline of Northern Ireland. These other records were not utilised during the current CAMSAR survey, which concentrated solely on archaeological sites and monuments in the NISMR that dated to before AD 1700.

## 4.2 PROTECTION OF ARCHAEOLOGICAL SITES

NIEA is the government agency with lead responsibility for the protection of the archaeological resource in Northern Ireland<sup>29</sup>. The statutory protection for archaeology is provided under the *Historic Monuments and Archaeological Objects (NI) Order 1995* (referred to hereafter as the HMAOO), with supplementary regulation provided by the *Historic Monuments (Class Consents) Order (NI) 2001*. The HMAOO contains a very wide range of provisions, including the statutory protection of sites and monuments, regulation of works to specially protected sites, the licensing of archaeological excavations and searches for artefacts (including provisions affecting metal detecting) and mandatory reporting of finds.

### 4.2.1 Development and land use change

Development and land use change is primarily regulated under the provisions of the *Planning (NI) Order 1991*, and the *Planning (General Development) Order (NI) 1993*, along with several other pieces of planning-related legislation (many of which derive from EU legislation and regulations) that have been enacted since the early 1990s. *Planning Policy Statement 6: Planning, Archaeology and the Built Heritage* (adopted in 1999) provides the primary policy context for the Department of the Environment in the consideration of the built heritage in its many forms and new development proposals. In essence, all known archaeological sites and monuments recorded in the NISMR are protected by policy under the provisions of planning legislation, particularly through the *Planning (General Development) Order (NI) 1993* and its subsequent amendments.

### 4.2.2 Agriculture and rural development

There is a close connection between the management of the archaeological resource and agricultural practice in Northern Ireland, given that around 75% of Northern Ireland's land area is in agricultural use<sup>30</sup>. European agricultural policies and supports in the 1970s and 1980s led to the reclamation, improvement and drainage of marginal land. During this process many archaeological sites were destroyed or modified. Others were damaged when small pasture fields were amalgamated into larger fields removing historic boundaries<sup>31</sup>. By the close of the 1980s, the negative impact that such policies were having on, amongst other things, the historic landscape was being recognised within the EU and reforms of the Common Agriculture Policy (CAP) were made<sup>32</sup>. The reforms of CAP have taken place under Agenda 2000, which aims to move policy away from price-support and towards integrated rural policies<sup>33</sup>. This policy shift saw the introduction in 1986 of the Environmentally Sensitive Area (ESA) scheme in the UK through Article 19 of EU Council Regulation 797/85.

Throughout this period increased collaboration between government departments, particularly between government archaeologists and inspectors in the Department of Agriculture, brought the management of the archaeological resource to the fore. The retention and prescription for the management of archaeological sites became standard practice as part of the voluntary, individual ESA farm plans<sup>34</sup>.

The Countryside Management Scheme (CMS) was introduced in 2000 by the Department of Agriculture and Rural Development (DARD) and has the potential to include all farm land outside the ESA designated areas. DARD has responsibility for implementing agri-environment schemes in Northern Ireland, and deals with applications, promotion of best practice, farm inspections and training. The purpose of the agri-environment schemes (CMS and ESA) is to ensure that flora and fauna, historic monuments, historic features and environmentally-important landscapes, such as wet meadows and heather moorland, are protected in the management of agricultural land<sup>35</sup>. Such schemes are entirely voluntary, and landowners may enter a 10-year management agreement to comply with the regulations.

Compensation is paid for incomes lost due to restrictions imposed through these schemes, and related capital works may be grant aided<sup>36</sup>. The aim is to encourage the positive management of natural habitats, water quality, the enhancement of the landscape and the protection of heritage, while ensuring biodiversity and long-term sustainability of unique landscapes<sup>37</sup>. The agri-environment schemes are managed UK-wide by the Rural Development Programme deriving from EU Regulation and, by 2003, 25% of landowners in Northern Ireland were participants<sup>38</sup>. By the end of 2005, 33% of farmers had applied to join, or were participating in an Environmentally Sensitive Area or Countryside Management Scheme.

#### **4.2.3 Good farming practice**

These schemes afford positive protection to archaeological features, informing landowners of sites on their land and of actions that are necessary to protect them. For example, archaeological sites, along with a surrounding 10-metre zone, must not to be ploughed, planted with trees, crossed by vehicles or used as an access route. Overgrazing is not permitted and dead or diseased trees must be cut to reduce the risk of them being blown down/uprooted bringing large scoops of earth with them and leaving holes in the surface of a site. Scrub vegetation on or near a monument may require careful management to prevent invasion. Supplementary feeding sites, water troughs and silage storage are not permitted, to prevent concentrations of trampling. Installation of new drainage systems is not allowed, and dumping and burning must not take place on an archaeological site<sup>39</sup>. Management recommendations include filling rutted or eroded areas of land with sharp stone and sand and soil mixed with grass seed, and excluding stock to allow for grass regeneration. The root plate of any fallen tree must be placed back into its original position after the tree itself has been cut into pieces for removal from the site. Scrub must only be treated by cutting to ground level and sprayed, if required, with approved herbicides.

#### **4.2.4 Forestry**

Archaeological sites are well managed under the policies of the Forest Service, and their operational objective is “to protect and conserve forests and the associated areas of special natural and heritage interest”<sup>40</sup>. Guidelines issued by the Forest Service include best practice with regard to archaeological features. They recommend that an area of at least 20 metres around monuments should be left clear of new forestry planting, and that groups of monuments should ideally be left in a single clearing<sup>41</sup>. When harvesting operations are planned, the Forest Service recommends that all



historic monuments should be clearly identified with buffer zones prior to works commencing. It is also specified that no machinery should be driven over monuments and that any trees growing on them should be cut to ground level and removed from the site<sup>42</sup>.

The Forestry Commission for Great Britain has produced a booklet detailing guidelines for the treatment of archaeological sites in forests in England, Scotland and Wales<sup>43</sup>. These also deal with new planting and, in addition to the guidelines noted above in the Forest Service information, the Forestry Commission prescribes that fences should not cross monuments, and that drains should be sited at a distance from them. They also advise that in certain cases the visibility of monuments in the wider landscape should be protected, and that access to sites should be secured for management purposes<sup>44</sup>. Trees liable to wind blow should be monitored and removed before causing damage to an archaeological site. The Northern Ireland Forest Service has also published local guidelines for the treatment of archaeological sites in woodland.

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5



## **METHODOLOGY**

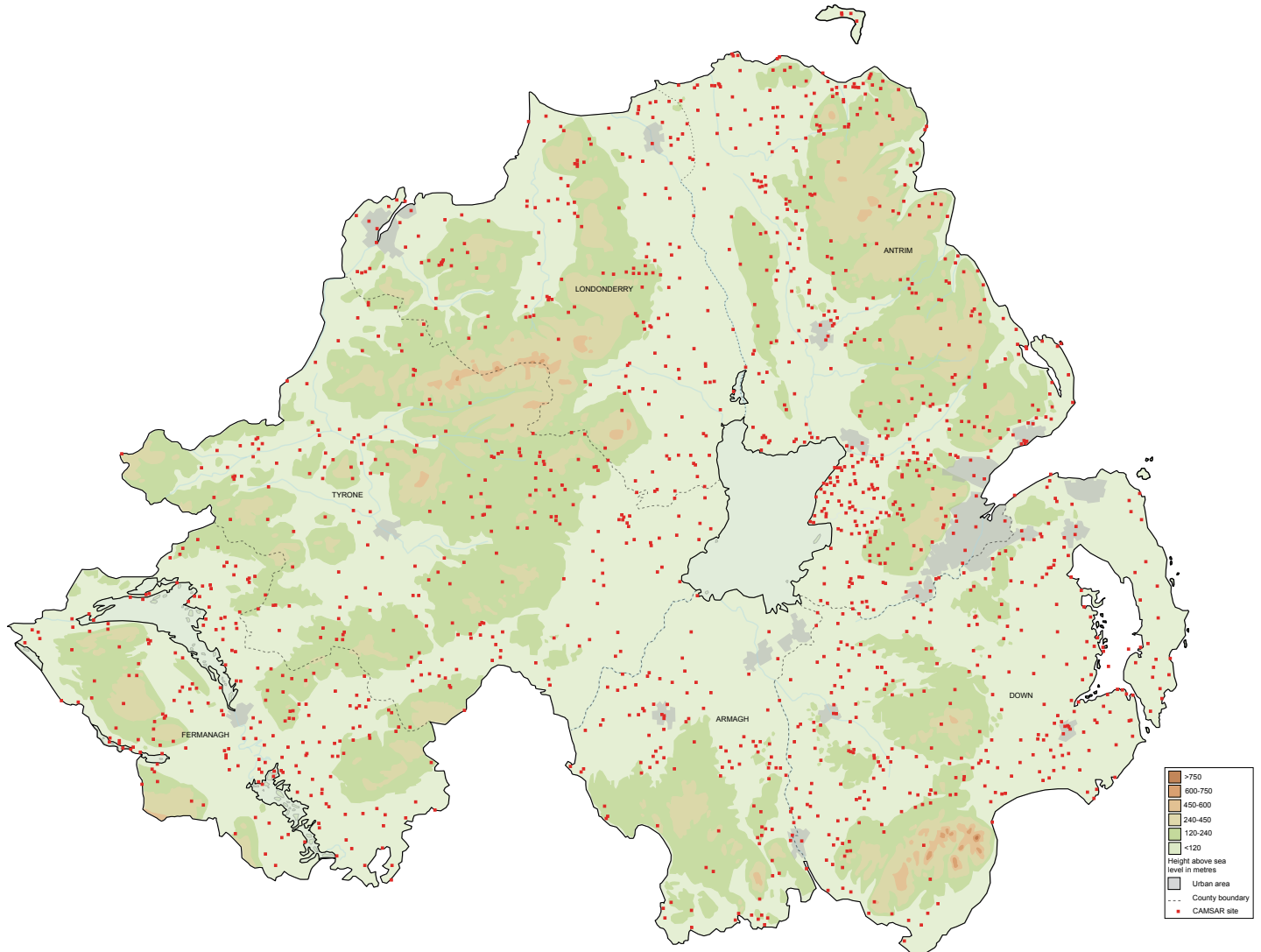






## 5 METHODOLOGY

### 5.1 SITE SELECTION



**Figure 1 Map of Northern Ireland indicating the location of sites included in this CAMSAR study.**

Individual sites were randomly selected from the total corpus of sites in the NISMR. As previously noted, the present CAMSAR study included only those sites and monuments which dated to before AD 1700 and did not include sites from the Historic Buildings Record, the Industrial Heritage Record, the Maritime Record, defence heritage, battlefields or those noted in the Heritage Gardens Inventory. Some 1500 sites, approximately 10% of the total recorded in the NISMR at the time, were chosen at random providing a statistically valid sample that could be visited in the course of the study (Table 1). The 2003 NISMR, containing 14,853 sites, was used for the site selection process. This was made easier by the fact that the NISMR is centralised in NIEA and is a fully electronic resource. A simple database filter was used to exclude sites which had been identified as natural features and

**Table 1 The selected CAMSAR sites as a percentage of the total number in the SMR and the total number of located sites in the SMR. The figure of 14853, accurate in 2003, has since risen to around 16000 in 2006.**

| Protection Category           | Antrim (ANT) | Armagh (ARM) | Down (DOW) | Fermanagh (FER) | Derry (LDY) | Tyrone (TYR) | Total |
|-------------------------------|--------------|--------------|------------|-----------------|-------------|--------------|-------|
| Total SMR                     | 5084         | 983          | 2906       | 1857            | 1943        | 2080         | 14853 |
| Total located SMR             | 4197         | 880          | 2832       | 1800            | 1417        | 2015         | 13141 |
| CAMSAR sample                 | 474          | 108          | 297        | 212             | 182         | 227          | 1500  |
| CAMSAR as % total SMR         | 9.32         | 10.99        | 10.22      | 11.42           | 9.37        | 10.91        | 10.10 |
| CAMSAR as % total located SMR | 11.29        | 12.27        | 10.49      | 11.78           | 12.84       | 11.27        | 11.41 |

those with no known location. The CAMSAR sites were then selected using a random number generator from the remaining 13,141 sites (Appendix 1).

The sample in the current study was representative of those contained in the NISMR. It has therefore included sites previously recorded as destroyed and those with no visible remains, as well as some other less tangible sites and monuments such as those represented only through aerial photography. It was important to include all of these in the statistical analysis in order to provide a fuller snapshot from the NISMR, revealing the statistical condition and survival of monuments contained in that record.

This method of selecting individual sites for assessment varies from that employed in other similar projects: the *Monuments at Risk Survey (MARS)* in England used a sample of randomly chosen geographical transects, while the *Archaeological Features at Risk Project (AFAR)* in the Republic of Ireland concentrated on a selection of individual study areas. In Northern Ireland, archaeological sites and monuments are allocated unique record numbers, with most monuments identified on a site-by-site basis. The CAMSAR project was therefore based on the selection of individual sites, rather than assessing collections of monuments present in a series of particular landscapes or randomly selected geographical transects.

## 5.2 DATA COLLECTION

Following the selection of sites from the NISMR, information on each monument was collated to serve as a comparative baseline during field visits. Location maps at approximately 1:30,000 and 1:3,500 scales were printed from digital maps and the relevant parts of the most recent Ordnance Survey six-inch maps copied for each site. Information on Scheduled Monuments was also reviewed and noted. Reports on the scheduled sites in the sample by field monument wardens were included in this initial data-capture ensuring that all available information had been assessed prior to the commencement of the CAMSAR fieldwork.

## 5.3 FIELDWORK

Two fieldworkers conducted inspections of all the sites between June 2004 and August 2005. Sites were located in the field using maps, augmented by the use of GPS and local information (from time to time landowners and neighbours were able to direct the fieldworkers to sites).

Factors affecting the progress of the field survey included weather and form of terrain. Improved grassland was generally easier to negotiate than peatland, while more densely-populated lowland areas tended to have a better roads infrastructure. Locating sites in areas of forestry, especially in dense conifer plantations, was particularly difficult. In those cases there were limited landmarks and there were difficulties in using GPS. The nature of the sites themselves also varied and affected the rate of survey. A single standing stone within an area of improved grassland could be assessed very quickly, whereas a large rath within an area of dense vegetation could take significantly longer.

Most of the sites visited are located on private land. The project was therefore dependant upon the interest and generosity of landowners, largely farmers, in facilitating access to monuments on their land. NIEA does not hold information on the owners of all the sites and monuments recorded in the NISMR. Where a monument has been statutorily protected there are records of landowners or occupiers, but for all other sites enquiries were made locally in the course of fieldwork to locate landowners who were generally found to be interested and knowledgeable about the archaeological monuments on their land.

The current survival and condition of each site was compared to that already recorded in the NISMR. Any changes were noted and problems or apparent threats recorded. A detailed pro forma was completed and the site was also photographed although these photographs do not do justice to many of the large earthworks, which are better captured from the air.

### **5.3.1 Pro forma**

The pro forma devised during the pilot scheme was used, with only slight modification (Appendix 2). This provided a standardised approach to field survey, compiling data that could be compared and analysed after the fieldwork was completed. The terminology used in completing the pro forma is that presently employed by NIEA for field survey.

### **5.3.2 Nature of sites inspected**

Not every archaeological site survives as an upstanding monument. While a site may not be upstanding, it will usually have below ground remains. Sites such as souterrains are inherently subterranean features, while shell-middens, artefact scatters or settlement sites may only survive within the soil at a site, not as upstanding mounds or walls. In some instances the level of vegetation at a site was so dense that a visual inspection of the remains was not possible.

A substantial number of sites was recorded in CAMSAR as sites with 'potential'. These included sites with little or no surface remains. While the general morphology of some archaeological sites may be identifiable through air photography, there are many instances where this is not so and where the finer details of the site are unclear. Sites such as these usually require further detailed investigation, best achieved through geophysical survey and/or excavation. It was not the remit of this study to conduct this type of investigation. As a result, many sites that have been identified by aerial photography continue to be described as sites of 'potential'. In a very small



number of instances a site that had been recorded was, in the opinion of the fieldworkers, a natural feature, and not an archaeological site.

## **5.4 DATA RECORDED IN THE COURSE OF FIELDWORK**

### **5.4.1 Land use (see also Appendix 3)**

#### *Specific – on-site*

This category was specific to the type of land use at each site at the time of visit, and relates to land use both on the monument and in a zone of 10m outside the monument. A list of 50 types of land use were used to record detailed information about each site. Often more than one type was found, and as many as four were recorded in some cases. The use of land associated with a site will bear direct relation to the factors which might affect its condition and survival.

#### *Specific – around the site*

The form of land use in the immediate area beyond the 10m radius noted above was recorded using the same codes. This provided a detailed baseline for each site, aiding future comparison and highlighting factors that might potentially affect the future conservation of each site.

#### *General*

This category is a composite of the more detailed land use information recorded under the previous headings, and allows for sites to be assigned to more general groups to facilitate statistical analysis. The fifty specific types of land use are grouped into ten broad bands. Thus, for example, the use of land for 'quarry', 'housing estate' and 'road' all fall within the broad band of 'development'. The 'land use category' field essentially grouped the 'specific' types according to the management issues which may result from them. This was to facilitate analysis of the factors affecting the preservation of sites in each category.

### **5.4.2 Structural category (see also Appendix 4)**

The threats which a monument may face will most often be linked to the material from which the monument was constructed. This subdivision therefore allows for analysis of the different factors found to be affecting the various monument types. For CAMSAR in the 'structural category', the principal material that forms a monument, was classified as one of eight types. For example, structures such as a 'standing stone' and 'passage tomb', were assigned to the 'orthostatic monument' category, while monuments such as 'barrows' and 'mottes' were grouped under 'earthworks'.

### **5.4.3 Survival (see also Appendix 5)**

In recording survival, the aim was to quantify how much of a site was presently extant. A judgement about the likely original form of a site was

made, based on knowledge about other similar sites, especially those that have been archaeologically excavated. This informed an assessment of the kinds of changes that are likely to have taken place. Over hundreds or thousands of years a site may deteriorate naturally. A view was formed about whether or not a site had deteriorated naturally or whether loss had been caused or accelerated by other factors.

The six codes used in the field illustrate as accurately as possible how much of a site survives. For example, a court tomb with its cairn intact can be described as 'complete or substantially complete'. However, if the cairn has been removed then it might be described as 'substantial – vast majority definable'. If some of the orthostats (upright stones) were missing, but it was still recognisable as a court tomb then it was classed as having 'some definable features'. Where only fragmentary remains survive it might be described as 'traces – no definable features'. If all above ground traces of the site had been removed, however, then it was described as 'all above ground features removed – no visible remains'.

As noted above, the absence of above ground remains does not always mean that a site has been completely destroyed. As this survey involved only field inspection and not archaeological excavation, no assessment was made of buried archaeological remains. It should be noted that while a site can be described as having 'all above ground features removed – no visible remains', substantial evidence may survive below ground. The sixth category 'survival uncertain – no visible remains' was used when it was not possible to assess the survival of a site. Sites identified by aerial photography, particularly those for which there was no other evidence of an archaeological site, were usually included in this category.

#### **5.4.4 Condition (see also Appendix 6)**

Assessment of condition was based on two factors: whether or not a site was maintained as an historic monument, and how robust the remains in question appeared to be. Sites can be maintained, partially maintained or not maintained. Sites which were categorised 'excellent (well maintained)' tended to be those in State Care, i.e. monuments which are generally accessible, maintained and well-conserved. A site which was defined as being 'good (not fully maintained)' may, for example, be a medieval stone cross in a graveyard which is accessible to the public and has the grass cut and surrounding grounds maintained, or a Scheduled Monument for which there is a management agreement between the owner and NIEA.

The majority of archaeological sites, however, have no special provision for maintenance. In addition to the general maintenance of a site, a judgement was made as to how robust a site was in its general condition. Most sites fell into the category 'fair (not maintained)', meaning that although they were not actively being maintained, they were still stable and not deteriorating. A site in 'poor' condition was one that was actively being eroded or otherwise deteriorating, for example, a rath bank which was being trampled by cattle or which had been pitted with rabbit burrows or badger sets. The 'poor (not maintained)' was used for those sites which are unstable as a result of such damage. The 'all above ground features removed – no visible remains' and

'condition uncertain – no visible remains' categories are used for condition in the same way that they are used for survival.

### **5.4.5 Surface and sub-surface problems**

This section was used to detail any damage or problems with a monument which could not be adequately covered using the codes used elsewhere on the form.

### **5.4.6 Damage sustained (see also Appendix 7)**

Damage to a site was classified as an event which had accelerated the loss of archaeological fabric. This is not always the complete destruction of a monument, and may reflect minor or localised damage. Damage of all kinds was recorded to gain an insight into the factors affecting each site. The percentage of a site affected was also assessed as accurately as possible to give a reliable account of the extent of such damage (Appendix 8). An attempt was made to determine whether or not the damage occurred in the past (more than five years ago) or recently (within the past five years).

There are 33 different types of damage recorded within the NISMR. It is difficult to establish precisely how a site has been damaged in the past, particularly when it is no longer visible but is believed to have been an upstanding monument. In these cases it may be assigned the category '17 – removal'. It may be that its destruction was in fact due to '2 – cultivation', but this cannot be demonstrated through field inspection alone. If the site had not been removed, but had been damaged in the past and the cause could not be established, '25 – Unknown' was noted on the pro forma. These codes were used to record damage thought to have occurred recently (i.e. within the last five years), or which appeared to be continuing.

### **5.4.7 Fencing**

The presence of fences at a site was also recorded during the field visit. This was to help assess the effect of fencing on the condition and survival of the monuments. Many sites such as raths have been fenced in the past to create small fields. In other cases, a monument has been used as a reference point for fencing and can have a fence running alongside or right across it. Fences which cross sites can lead to differences in treatment of the ground surfaces. Fencing can be used to control access by livestock and is sometimes recommended by NIEA for sites which have suffered from overgrazing to allow for recovery of the sward.

## **5.5 DATA INPUT AND ANALYSIS**

When fieldwork was completed, the data collected was entered into a Microsoft Access database. This information was then analysed to provide statistics on the condition and survival of sites. The CAMSAR data were also integrated into the NISMR, ensuring that the data can be easily accessed to inform conservation decisions. Photographs taken as part of the survey were

also archived in the NISMR. The list of photographs was catalogued and can be searched by photograph number, NISMR number, townland name, site type or description.

# 6



## **RESULTS OF THE FIELDWORK**







## 6 RESULTS OF THE FIELDWORK

The sample of sites surveyed for CAMSAR was found to cover a wide variety of site types with different levels of survival, a broad range of conditions, and many different types of land use. **Figure 1** shows the geographical spread of the 1500 sites inspected. As noted above there is a number of sites which, for a variety of reasons, were not visible in the field. **Table 2** below gives an indication of the overall percentages of sites in each county that were not visible when the fieldwork was conducted.

**Table 2 Percentages of sites in the sample for each county with a) visible and b) no visible remains**

|                       | ANT%  | ARM%  | LDY%  | DOW%  | FER%  | TYR%  |
|-----------------------|-------|-------|-------|-------|-------|-------|
| A) No visible remains | 58.02 | 48.15 | 45.05 | 41.08 | 31.13 | 37.44 |
| b) Visible remains    | 41.98 | 51.85 | 54.95 | 58.92 | 68.87 | 62.56 |

There are regional variations in the percentages of sites with no visible remains, and this often reflects regional differences in the distribution of certain types of monuments. For example, while County Antrim has the greater percentage of sites that are not presently visible above ground (58%), that county also has the highest number of sites identified from aerial photographs, sites that generally do not have above ground remains but which may nevertheless contain substantial buried archaeology.

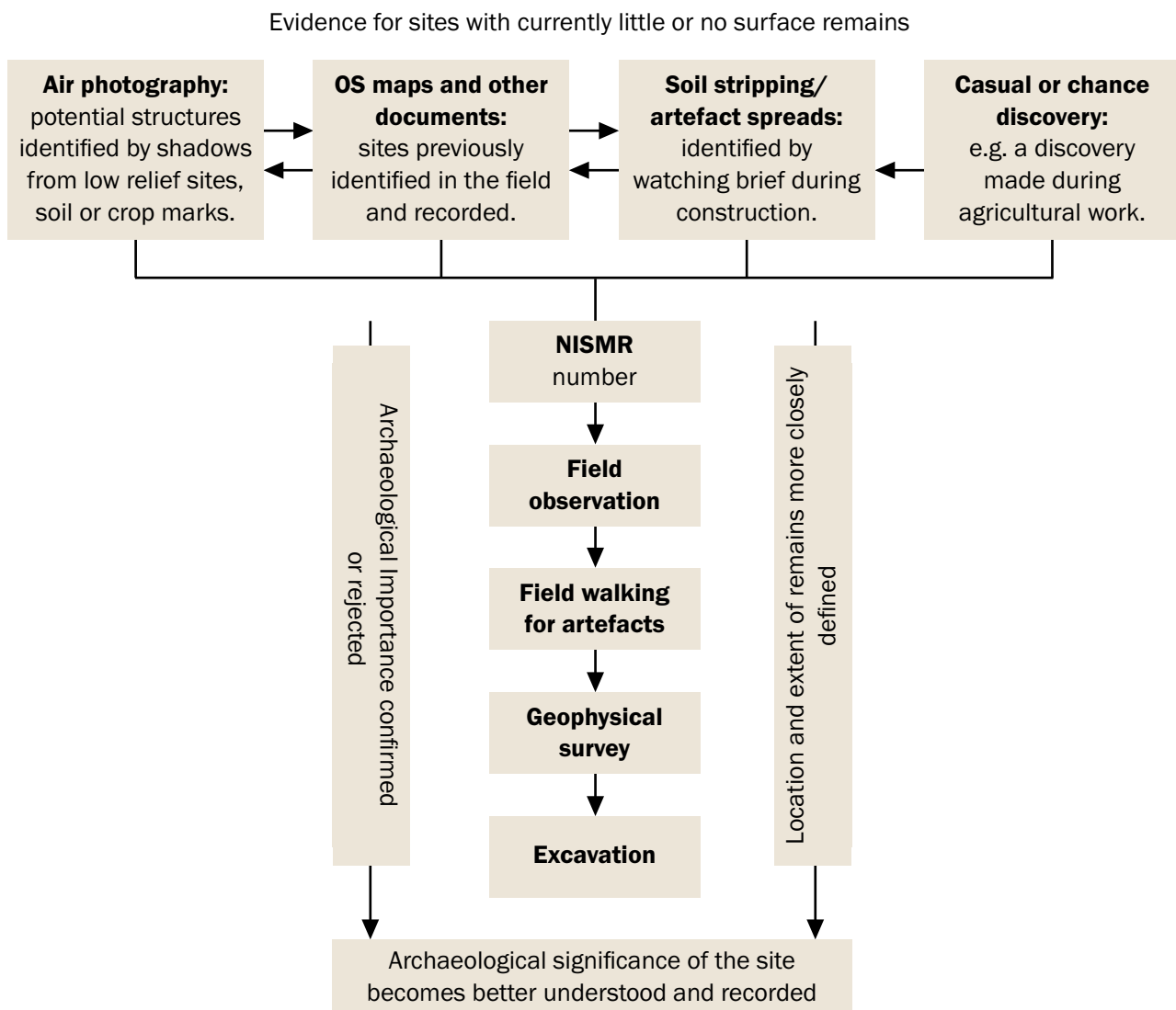
**Table 3 Percentage of definite archaeological and potential archaeological sites in the sample for each county**

|              | ANT%  | ARM%  | DOW%  | LDY%  | FER%  | TYR%  |
|--------------|-------|-------|-------|-------|-------|-------|
| Definite     | 72.57 | 91.67 | 85.86 | 87.91 | 86.79 | 86.78 |
| Potential    | 27.22 | 8.33  | 14.14 | 12.09 | 13.21 | 12.78 |
| No potential | 0.21  | 0.00  | 0.00  | 0.00  | 0.00  | 0.44  |

As previously noted, many sites have been recorded as sites of 'potential'. Only with more examination and eventually complete excavation can the full nature and extent of a site be revealed. There is an iterative process in archaeological investigation through which the nature and potential of a site can be assessed, and through which greater certainty can be achieved in interpreting the remains (Figure 2). In addition to many sites identified through aerial photography, several other sites were also described as being of 'potential'. These included cases where there is some uncertainty about the antiquity of the remains, such as certain standing stones, stone cairns and mounds that would need further investigation to provide a greater level of certainty (Table 3). These are not a significant number in the overall group.



**Figure 2 Achieving greater certainty: processes of validating the archaeological significance of a site**



## 6.1 LAND USE

Farmland accounts for some 75% of the land area of Northern Ireland<sup>45</sup>. Beef cattle and dairying are the predominant elements of the industry with only 5% of land in arable condition at present. Clearly this has fluctuated in recent centuries depending on population and wartime situations, but the area under crop has decreased significantly in the past ten years<sup>46</sup>. The predominance of livestock grazing has had a significant effect on the condition and survival of archaeological monuments. On the one hand the largely pastoral use of the countryside has been able to sustain a great number of archaeological sites. On the other hand, high numbers of grazing animals has lead to overgrazing in wet weather and too much erosion of these sites.

In order to facilitate more effective querying of the detailed data on land use, particularly with a view to analysing the effects of land use on the condition and survival of monuments, the information gathered for each site (using the 50 categories listed in Appendix 3) was grouped into ten composite categories.

### 6.1.1 Land use on site

Of the sites with a single type of land use recorded, over 32% (485 sites) were found to fall into the 'improved grassland' category, while over 7% (110) were found to be covered in scrub growth (Plate 1). When upstanding archaeological remains are within bushes and scrub vegetation (providing an increased biodiversity potential) in otherwise developed or improved areas, the site is left as an island and subject to different management regimes from surrounding land. Rough grazing (Plate 1) was found at just over 8% (125 sites) of the total, and unimproved grassland was encountered as the only type of land use at almost 2% of sites. Almost 4% (57 sites) were designated as 'built-over' by development of one type or another.

Although 81% of sites were found to have only a single type of land use, the remainder had more than one (Plate 2). Over 2%, for example, were recorded as having both 'scrub and improved grassland'.

**Table 4 Present and Past on-site land use**

| Landuse type on site        | Current use | Previously recorded use |
|-----------------------------|-------------|-------------------------|
| Lake                        | 10          | 0                       |
| Old/Mixed woodland          | 30          | 21                      |
| Deciduous woodland          | 16          | 10                      |
| Coniferous woodland         | 21          | 22                      |
| Scrub                       | 110         | 57                      |
| Arable                      | 44          | 36                      |
| Unimproved grassland        | 28          | 13                      |
| Improved grassland          | 485         | 182                     |
| Rough grazing               | 125         | 55                      |
| Blanket bog                 | 27          | 18                      |
| Cutaway bog                 | 11          | 0                       |
| Quarry                      | 11          | 10                      |
| Waste ground                | 12          | 0                       |
| Road                        | 6           | 0                       |
| Built over                  | 57          | 33                      |
| Garden                      | 26          | 16                      |
| Recreation                  | 6           | 6                       |
| Cemetery                    | 37          | 21                      |
| State Care monument         | 18          | 6                       |
| Pasture                     | 49          | 159                     |
| Housing estate              | 11          | 10                      |
| Farmyard                    | 31          | 19                      |
| Urban                       | 15          | 13                      |
| Field division/ boundary    | 30          | 22                      |
| Rock outcrop                | 6           | 0                       |
| Old/mixed woodland, scrub   | 12          | 7                       |
| Old/mixed woodland, pasture | 7           | 0                       |
| Deciduous woodland, scrub   | 4           | 0                       |
| Coniferous woodland, scrub  | 6           | 0                       |
| Scrub, unimproved grassland | 11          | 0                       |

**Table 4 Present and Past on-site land use (continued)**

| Landuse type on site                   | Current use | Previously recorded use |
|--|-------------|-------------------------|
| Scrub, improved grassland              | 33          | 0                       |
| Scrub, rough grazing                   | 12          | 8                       |
| Scrub, pasture                         | 40          | 0                       |
| Improved grassland, rough grazing      | 0           | 7                       |
| Improved grassland, road               | 5           | 0                       |
| Improved grassland, farmyard           | 7           | 0                       |
| Improved grassland, farmyard, boundary | 3           | 0                       |
| Improved grassland, boundary           | 26          | 0                       |
| Built over, garden                     | 5           | 0                       |
| Other                                  | 100         | 87                      |
| No information                         | 0           | 662                     |
| <b>Total</b>                           | <b>1500</b> | <b>1500</b>             |

As older land use data was not available from the NISMR for many of the sites, comparisons could not be made between the land use at 56% of the 1500 sites and a previous field inspection (Table 4). Grassland was previously the most commonly encountered land use type, with 12% of on-site land use recorded as improved grass, and pasture representing 11%. Almost 4% were found to have scrub on site and 2% were recorded as being located in arable land.



**Plate 1 Examples of land use.**  
**Clockwise from top left - arable, improved grassland, scrub, and rough grazing.**



**Plate 2 Ballyreagh Lower/Ballyvoy Cashel (ANT 009:010) has been part-planted with conifers. Tonardrum/Cavantreeduff Rath (FERM 228:011) has been part-planted with conifers.**

### 6.1.2 Land use around sites

The use of land around a site has important implications for its condition and survival. Table 5 shows the types of uses which were found adjacent to sites during the CAMSAR survey and as recorded in the past.

**Table 5 Past and present types of land use around sites**

| Landuse type, around site               | Current use | Previously recorded use |
|---|-------------|-------------------------|
| Lake                                    | 28          | 13                      |
| Old/Mixed woodland                      | 9           | 0                       |
| Deciduous woodland                      | 5           | 0                       |
| Coniferous woodland                     | 26          | 15                      |
| Scrub                                   | 6           | 0                       |
| Arable                                  | 50          | 47                      |
| Unimproved grassland                    | 16          | 11                      |
| Improved grassland                      | 656         | 204                     |
| Wet pasture                             | 5           | 6                       |
| Rough grazing                           | 118         | 54                      |
| Blanket bog                             | 28          | 18                      |
| Cutaway bog                             | 6           | 0                       |
| Quarry                                  | 9           | 13                      |
| Built over                              | 16          | 11                      |
| Garden                                  | 10          | 13                      |
| Cemetery                                | 11          | 9                       |
| State Care monument                     | 5           | 0                       |
| Pasture                                 | 60          | 175                     |
| Housing estate                          | 7           | 7                       |
| Farmyard                                | 11          | 12                      |
| Urban                                   | 51          | 23                      |
| River, improved grassland               | 8           | 0                       |
| Deciduous woodland, improved grassland  | 5           | 0                       |
| Coniferous woodland, improved grassland | 9           | 0                       |
| Coniferous woodland, rough grazing      | 9           | 0                       |

**Table 5 Past and present types of land use around sites (continued)**

| Landuse type, around site          | Current use | Previously recorded use |
|------------------------------------|-------------|-------------------------|
| Arable, improved grassland         | 9           | 0                       |
| Improved grassland, rough grazing  | 12          | 12                      |
| Improved grassland, road           | 37          | 0                       |
| Improved grassland, road, garden   | 6           | 0                       |
| Improved grassland, road, farmyard | 14          | 0                       |
| Improved grassland, garden         | 6           | 0                       |
| Improved grassland, farmyard       | 33          | 0                       |
| Improved grassland, boundary       | 6           | 0                       |
| Rough grazing, blanket bog         | 6           | 0                       |
| Other                              | 207         | 123                     |
| No information                     | 0           | 734                     |
| <b>Total</b>                       | <b>1500</b> | <b>1500</b>             |

Broad trends in Table 5 reflect changing agricultural practices as well as NIEA protection work in recent decades. Where data were available, comparisons could be made about land use adjacent to a site. This was possible for 51% of the CAMSAR survey. The doubling of sites within urban areas reflects the pace of modern development activity.

### 6.1.3 Composite land use

Over 24% of sites (367 sites) were associated with more than one specific type of use, for example, improved grassland and roads accounted for 2.5% of sites. The information detailed above was grouped into 10 composite bands (Appendix 3), so that general land use trends become more apparent and more effective querying of the data can be undertaken.

Once the information was grouped in this way, it was easier to identify key types of land use that dominated or impacted upon the archaeological resource (Table 6).

Over 82% of the sites could be assigned to a single composite category, whilst the remainder were assigned more than one. For example, although 508 sites were solely on improved grassland, a further 33 sites had both woodland and improved grassland associated with them and, as such, were grouped into the 'improved grassland and woodland' category.

### 6.1.4 Grassland

Within the composite groupings, grassland was the predominant land use type (approximately 50% of the sample), reflecting the pastoral nature of farming in Northern Ireland (Table 6). The high instance of improved grassland in particular, both on and around archaeological sites, has implications for condition and survival. The process of improvement may involve the removal of boundaries and other features (such as historic gateways and lanes). Even when the process of improving grassland does not involve the intentional removal of the monument itself, the monument can still be damaged and many associated features, especially outlying elements, can be lost.

**Table 6 Number of sites in each of the land use categories. Categories with less than 5 sites (for example 'Development & Woodland') are grouped under 'Other Categories'.**

| Category                         | ANT        | ARM        | DOW        | FER        | LDY        | TYR        | Total       | %           |
|----------------------------------|------------|------------|------------|------------|------------|------------|-------------|-------------|
| Improved Grassland               | 197        | 40         | 90         | 34         | 72         | 75         | 508         | 33.87       |
| Development                      | 79         | 22         | 68         | 18         | 31         | 40         | 258         | 17.20       |
| Woodland                         | 48         | 12         | 32         | 52         | 24         | 25         | 193         | 12.87       |
| Wetland                          | 80         | 3          | 9          | 34         | 20         | 29         | 175         | 11.67       |
| Unimproved Grassland             | 25         | 6          | 17         | 24         | 5          | 11         | 88          | 05.87       |
| Unimproved Grassland & Woodland  | 2          | 1          | 23         | 12         | 10         | 13         | 61          | 04.07       |
| Arable                           | 16         | 1          | 19         | 1          | 6          | 2          | 45          | 03.00       |
| Improved Grassland & Woodland    | 1          | 7          | 12         | 5          | 1          | 7          | 33          | 02.20       |
| Boundaries                       | 13         | 5          | 2          | 3          | 0          | 9          | 32          | 02.13       |
| Improved Grassland & Boundaries  | 1          | 4          | 15         | 2          | 2          | 2          | 26          | 01.73       |
| Freshwater                       | 0          | 0          | 3          | 11         | 2          | 3          | 19          | 01.27       |
| Improved Grassland & Development | 1          | 1          | 1          | 5          | 3          | 2          | 13          | 00.87       |
| Wetland & Woodland               | 0          | 1          | 1          | 7          | 2          | 1          | 12          | 00.80       |
| Coastal Zone                     | 1          | 0          | 2          | 0          | 2          | 0          | 5           | 00.33       |
| Other Categories                 | 10         | 5          | 3          | 4          | 2          | 8          | 32          | 02.13       |
| <b>Total</b>                     | <b>474</b> | <b>108</b> | <b>297</b> | <b>212</b> | <b>182</b> | <b>227</b> | <b>1500</b> | <b>100%</b> |

Reseeding every 7-10 years, an important part of maintaining improved grassland, can also damage archaeological deposits. Fields of improved grassland are often used to graze beef and dairy cattle. Again, while usually an unintentional outcome, such land use can pose a threat to delicate archaeological material. Since joining the EU in 1973, subsidies for beef and dairy production led to greater numbers of stock on the land. The introduction of heavier, European breeds with greater fields to accommodate them was encouraged leading to much erosion of archaeological sites especially during wet periods.

### 6.1.5 Development

Development accounts for 17.2% of land use (Table 6). Development as recorded here includes gardens, cemeteries, recreation areas and roads as well as buildings. Inherent threats can include the loss of sites through further building works. It should also be noted that even when not physically built over, a site can lose all relationship to its surrounding landscape if it becomes subject to inappropriate development. Where this happens the site can become an island or relic within a built-up area, and may be neglected, overgrown, or become associated with anti-social behaviour (Plate 3). Conversely, there are some sites, primarily those which are actively managed as historic monuments, which survive in good condition within an urban area, and are afforded additional protection where they are recognised as part of a visitor attraction or community recreational area.



**Plate 3 South Mullaghcall standing stone (LDY003:072) and Ballintine rath (DOW 014:037) both survive within modern housing developments.**

### 6.1.6 Woodland

Almost 20% of sites have been included in the woodland category, which includes both deciduous and coniferous forestry, and well as adjacent scrub cover and bracken. While such cover can offer some protection to a monument, there are inherent threats to archaeological remains from root action and particularly potential damage caused if trees are uprooted in clear felling or wind blow. Activities associated with woodland management, such as initial planting and drainage works, harvesting and the operation of heavy machinery can seriously harm archaeological remains. The Wykeham survey found that sites suffered damage and erosion most often due to the movement of vehicles and equipment and during the extraction of timber<sup>47</sup>. Woodland and scrub can act as shelter for livestock and burrowing animals, creating damage through erosion and the undermining of a site. Access can also be difficult in this land use type, making difficulties for the inspection of remains and conducting remedial works.

### 6.1.7 Wetland

Over 12% of sites are on wetland, such as peatlands (including the 'Wetland' and 'Wetland and Woodland' categories). Some wetland is also used for rough grazing. Sites on this type of land tend to be less affected by pressures found in the 'improved' categories. Wetland sites are often at risk from future improvement, including drainage and reclamation, which radically changes the hydrological environment of buried archaeological remains.

### 6.1.8 Local factors

There is a significant variation in patterns of land use in each of the counties of Northern Ireland (Table 7). Fermanagh, for example, has a smaller percentage of 'improved grassland' (16%: 34 sites) and 'development' (8.5%: 18 sites) than the other counties, and a higher proportion of 'unimproved grassland' (11.3%: 24 sites) and 'woodland' (24.5%: 52 sites). This is generally reflective of land quality within the county, though social and economic factors may also have an influence.

County Down has the highest percentage of sites in 'development' (22.9%: 68 sites) and 'arable' (6.4%: 19 sites) land use. Antrim has a high percentage in both the 'improved grassland' (41.6%: 197 sites) and 'wetland' categories (16.9%: 80 sites). In County Antrim there has been significant land improvement in the Bann Valley, which contrasts with the unimproved rough grazing and uplands of the Antrim plateau and Glens.

**Table 7 Percentages of sites in each county according to categories of land use. Categories with 5 or fewer sites are grouped under 'Other'**

| Category                         | ANT        | ARM        | DOW        | FER        | LDY        | TYR        | Total       | %           |
|----------------------------------|------------|------------|------------|------------|------------|------------|-------------|-------------|
| Improved Grassland               | 197        | 40         | 90         | 34         | 72         | 75         | 508         | 33.87       |
| Development                      | 79         | 22         | 68         | 18         | 31         | 40         | 258         | 17.20       |
| Woodland                         | 48         | 12         | 32         | 52         | 24         | 25         | 193         | 12.87       |
| Wetland                          | 80         | 3          | 9          | 34         | 20         | 29         | 175         | 11.67       |
| Unimproved Grassland             | 25         | 6          | 17         | 24         | 5          | 11         | 88          | 05.87       |
| Unimproved Grassland & Woodland  | 2          | 1          | 23         | 12         | 10         | 13         | 61          | 04.07       |
| Arable                           | 16         | 1          | 19         | 1          | 6          | 2          | 45          | 03.00       |
| Improved Grassland & Woodland    | 1          | 7          | 12         | 5          | 1          | 7          | 33          | 02.20       |
| Boundaries                       | 13         | 5          | 2          | 3          | 0          | 9          | 32          | 02.13       |
| Improved Grassland & Boundaries  | 1          | 4          | 15         | 2          | 2          | 2          | 26          | 01.73       |
| Freshwater                       | 0          | 0          | 3          | 11         | 2          | 3          | 19          | 01.27       |
| Improved Grassland & Development | 1          | 1          | 1          | 5          | 3          | 2          | 13          | 00.87       |
| Wetland & Woodland               | 0          | 1          | 1          | 7          | 2          | 1          | 12          | 00.80       |
| Coastal Zone                     | 1          | 0          | 2          | 0          | 2          | 0          | 5           | 00.33       |
| Other Categories                 | 10         | 5          | 3          | 4          | 2          | 8          | 32          | 02.13       |
| <b>Total</b>                     | <b>474</b> | <b>108</b> | <b>297</b> | <b>212</b> | <b>182</b> | <b>227</b> | <b>1500</b> | <b>100%</b> |

Other factors (often less tangible in research such as the CAMSAR project but nevertheless important factors 'on the ground') influence the use of land upon which the survival of an archaeological site depends. This may be the relative importance an individual or community gives to an archaeological site. There are also local traditions and superstitions that still influence how a site is viewed and treated. It was evident that, in some regions, there was a strong reluctance to remove thorn trees or bushes from a monument. The tradition that to harm a site or its vegetation would incur the wrath of the 'fairy folk' is still strong in some places and particularly held by older generations. This has no doubt saved a good number of sites from destruction in the past.

## 6.2 Structural category

Structural types are divided into eight categories reflecting the material composition of a monument (Appendix 4). For example, sites such as standing stones and megalithic tombs are classified as 'orthostatic



monuments', while the 'piled stone' group includes cairns and cashels. 'Earthworks' comprise raths, sites identified from aerial photography, and mottes (Plate 4). This sub-division of sites allows for analysis of the factors affecting each type, since the different materials influence their sensitivity to weathering and certain damaging activities.



Orthostatic monument: standing stone (Tamnaharry, Down DOW 051:059).



Earthwork: henge (Knock Beg, Fermanagh FER 191:039).



Freshwater structure: crannog (Lisnadurk Glebe North, Fermanagh FER 191:039).



Masonry structure: tower house (Walshestown, Down DOW)



Carved stone: high cross (Donaghmore, Tyrone TYR 046:011).

**Plate 4 Examples of sites in each of the main structural categories.**

The analysis of the condition and survival of sites in each structural category highlights the main risk factors to each, and identifies those which are most at risk. This contributes towards the development of specific protection management strategies.

**Table 8 Number of sites in each of the structural categories.**

| Category   | ANT        | ARM        | DOW        | FER        | LDY        | TYR        | Total       | %           |
|--|------------|------------|------------|------------|------------|------------|-------------|-------------|
| Earthwork  | 303        | 68         | 194        | 126        | 105        | 121        | 917         | 61.13       |
| Orthostatic monument                             | 32         | 11         | 21         | 26         | 25         | 43         | 158         | 10.53       |
| Masonry structure                                | 53         | 9          | 28         | 19         | 17         | 9          | 135         | 09.00       |
| Piled stone structure                            | 22         | 5          | 14         | 12         | 11         | 21         | 85          | 05.67       |
| Freshwater structure                             | 12         | 3          | 9          | 20         | 8          | 10         | 62          | 04.13       |
| Miscellaneous                                    | 27         | 0          | 2          | 5          | 2          | 3          | 39          | 02.60       |
| Burial/ burial mound                             | 9          | 1          | 7          | 0          | 6          | 2          | 25          | 01.67       |
| Carved stone                                     | 4          | 2          | 7          | 3          | 2          | 3          | 21          | 01.40       |
| Masonry & burial/<br>burial mound                | 5          | 6          | 4          | 1          | 5          | 4          | 25          | 01.67       |
| Masonry & carved stone<br>& burial/ burial mound | 2          | 0          | 4          | 0          | 0          | 2          | 8           | 00.53       |
| Earthwork & masonry                              | 2          | 1          | 2          | 0          | 0          | 1          | 6           | 00.40       |
| Orthostatic & earthwork                          | 1          | 0          | 3          | 0          | 1          | 1          | 6           | 00.40       |
| Freshwater & masonry                             | 0          | 1          | 2          | 0          | 0          | 1          | 4           | 00.27       |
| Orthostatic & piled stone                        | 0          | 0          | 0          | 0          | 0          | 3          | 3           | 00.20       |
| Carved stone & burial/<br>burial mound           | 1          | 0          | 0          | 0          | 0          | 0          | 1           | 00.07       |
| Freshwater & masonry &<br>burial/ burial mound   | 0          | 1          | 0          | 0          | 0          | 0          | 1           | 00.07       |
| Masonry & carved stone                           | 0          | 0          | 0          | 0          | 0          | 1          | 1           | 00.07       |
| Masonry & miscellaneous                          | 1          | 0          | 0          | 0          | 0          | 0          | 1           | 00.07       |
| Orthostatic & masonry                            | 0          | 0          | 0          | 0          | 0          | 1          | 1           | 00.07       |
| Piled stone & earthwork                          | 0          | 0          | 0          | 0          | 0          | 1          | 1           | 00.07       |
| <b>Total</b>                                     | <b>474</b> | <b>108</b> | <b>297</b> | <b>212</b> | <b>182</b> | <b>227</b> | <b>1500</b> | <b>100%</b> |

Table 8 shows the number of sites in each structural category. The 'earthwork' category dominates with over 60% of sites classed solely as this monument type, while the 'orthostatic' category holds 10% of the total. 'Masonry' monuments such as churches, sweathouses and souterrains form 9% of the total. Sites classed solely as 'piled stone' structures (for example, cairns) and 'freshwater structures' (such as holy wells) make up around 6% and 4% respectively. 'Carved stone' sites, including cup-and-ring marked stones, bullauns and stone crosses, make up just 1.5% of the total. Features classed as 'burial/burial mounds' include graveyards, killeens (children's burial grounds) and pit burials make up just 1.5% of the total. Around 2.6% fall into the 'miscellaneous' group. This includes monuments which cannot be readily classified within the other structural types, and includes penal sites, find-spots of artefacts and fords.

The majority of sites (96.1%) can be classed within a single structural type. A further 4%, however, belong to more than one structural type and these are described using a combination of the categories. Almost 1.7% of sites (25) fall into the 'masonry and burial/burial mound' category, and mainly comprise ancient churches and graveyards, while 0.5% (8) fall into the 'masonry, carved stone and burial/ burial mound' category.

The percentage in each structural category varies in each county. Table 9 shows the percentage of monuments in the main categories by county, and the results illustrate some notable differences between the monuments of each county. For example, almost 19% of the monuments in County Tyrone are classed as 'orthostatic', while the figure for this category is only around 7% in both Counties Antrim and Down. County Tyrone has a higher proportion of 'piled stone structures' at around 9%, whilst the percentage in the other counties ranges between 4.6% (in Counties Antrim and Armagh) and 6% (in County Londonderry).

**Table 9 Percentage of total number of sites in the sample in each county in the various structural categories. Categories with 8 or less individual sites are grouped under 'Other'**

| Category                                 | ANT%  | ARM%  | DOW%  | LDY%  | FER%  | TYR%  |
|--|-------|-------|-------|-------|-------|-------|
| Orthostatic monument                     | 6.75  | 10.19 | 7.07  | 12.26 | 13.74 | 18.94 |
| Piled stone structure                    | 4.64  | 4.63  | 4.71  | 5.66  | 6.04  | 9.25  |
| Earthwork                                | 63.92 | 62.96 | 65.32 | 59.43 | 57.69 | 53.30 |
| Freshwater structure                     | 2.53  | 2.78  | 3.03  | 9.43  | 4.40  | 4.41  |
| Masonry structure                        | 11.18 | 8.33  | 9.43  | 8.96  | 9.34  | 3.96  |
| Carved stone                             | 0.84  | 1.85  | 2.36  | 1.42  | 1.10  | 1.32  |
| Miscellaneous                            | 5.70  | 0.00  | 0.67  | 2.36  | 1.10  | 1.32  |
| Burial/ burial mound                     | 1.90  | 0.93  | 2.36  | 0.00  | 3.30  | 0.88  |
| Masonry structure & Burial/ burial mound | 1.05  | 5.56  | 1.35  | 0.47  | 2.75  | 1.76  |
| Other                                    | 1.48  | 2.78  | 3.70  | 0.00  | 0.55  | 4.85  |

All counties have high percentages of 'earthworks'. County Down has the highest at 65%, with figures ranging in other counties from 53% (in County Tyrone) to 64% (in County Antrim). The 'freshwater structure' category is highest in County Fermanagh (9.4%) as might be expected given its extensive lakelands and the commensurate number of crannogs. County Antrim has the smallest number of sites in this category (2.5%).

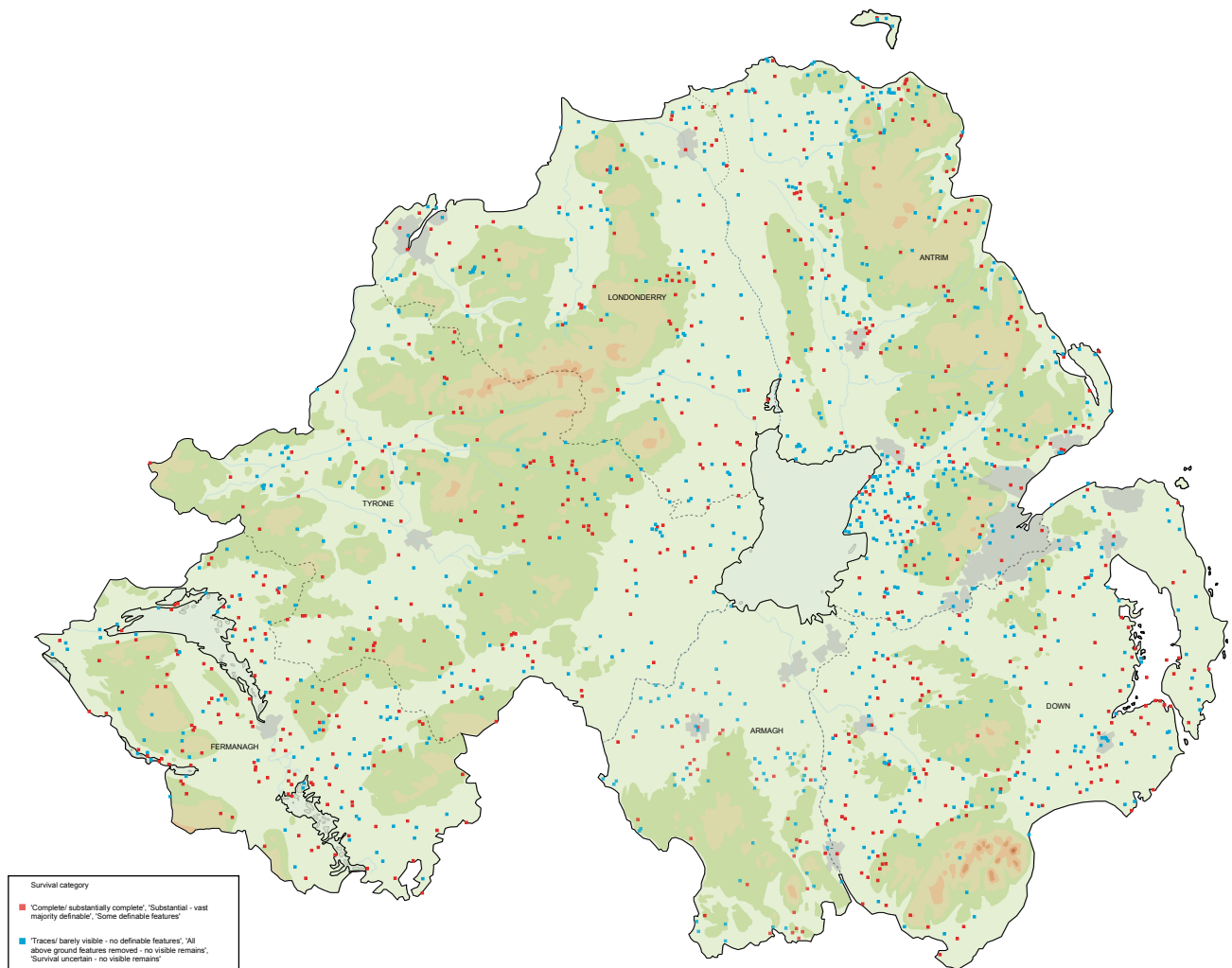
County Antrim has the highest percentage of monuments in the 'masonry' structural category, with 11.2%, while County Tyrone has the least at 4%. The four other counties have around 8% to 9% of their totals in this category. A small proportion of the total (21 sites) falls into the 'carved stone' category, and County Down has the greatest number at 2.4% (7 sites) of its total number of sites.

The variation of structural categories between counties is broadly reflective of the different types of archaeological remains one finds across the region. There is a high instance of prehistoric monuments in County Tyrone for example, while there are large numbers of Early Christian raths in County Down.

### 6.3 SURVIVAL

The actual proportion of remains that have survived at each of the archaeological monuments varies considerably. Figure 3 shows the monuments with good upstanding remains contrasted with those with barely visible remains.

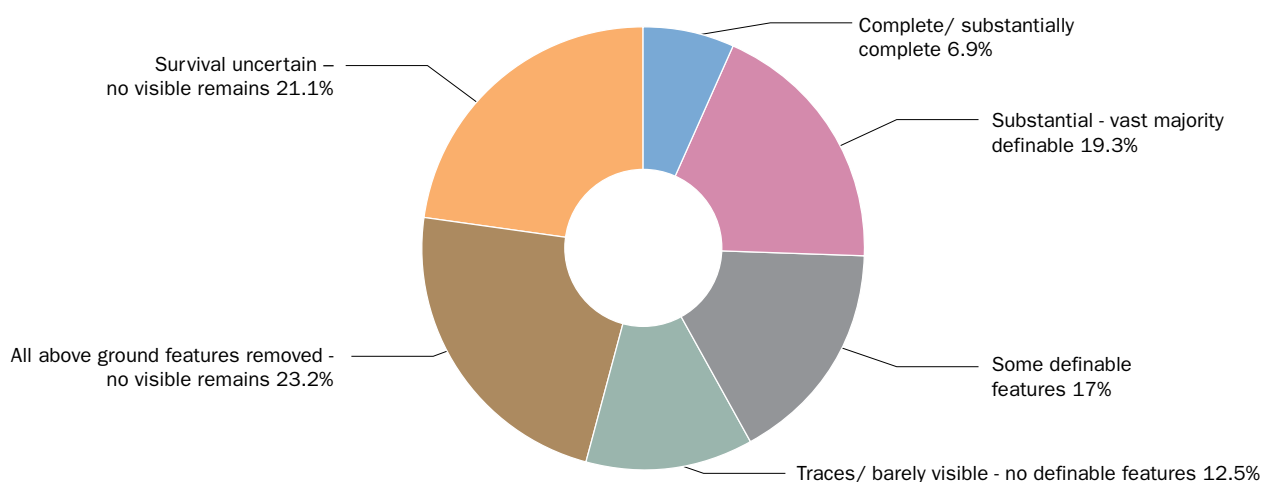
**Figure 3 Relative survival of sites visited during the CAMSAR Survey**



The measurement of survival used during the CAMSAR fieldwork was essentially an estimate of the quantity of physical remains surviving for each site. All sites undergo natural weathering and erosion processes, but it was important to establish, where possible, if natural processes of erosion had been accelerated because of land management at a site, or if precipitated factors had introduced new processes of deterioration.

The relative percentages of survival of each site identified in the CAMSAR survey is shown in Tables 10 and Table 11. Some 26.2% (393 sites) were found to be 'complete/substantially complete' or 'substantial - vast majority definable'. Sites in these two categories are those which have had little or no damage and outside factors do not appear to have significantly added to their deterioration. A further 17% have deteriorated to a degree that only some features can be recognised. Sites in the top three categories (43.2%

**Figure 4 Relative survival of the sample of 1500 sites included in the CAMSAR study (see also Table 10).**



**Table 10 Numbers and percentages of the total CAMSAR sample in each survival category**

| Survival   | No.of sites | % total    |
|--|-------------|------------|
| Complete/ substantially complete                       | 104         | 6.9        |
| Substantial - vast majority definable                  | 89          | 19.3       |
| Some definable features                                | 255         | 17         |
| Traces/ barely visible - no definable features         | 188         | 12.5       |
| All above ground features removed - no visible remains | 348         | 23.2       |
| Survival uncertain - no visible remains                | 316         | 21.1       |
| <b>Total</b>   | <b>1500</b> | <b>100</b> |

in total) are the best-preserved, since all have definable remains which have survived to the present day. The fourth group of 12.5% were found to have had only traces left, with no definable features on the ground, and includes monuments which were classified at one time by the Ordnance Survey or an archaeologist but which have had much of their above ground remains removed at some time in the past.

**Table 11 The percentages of sites within each county according to the level of surviving visible remains**

| Survival   | ANT%          | ARM%          | DOW%          | LDY%          | FER%          | TYR%          |
|--|---------------|---------------|---------------|---------------|---------------|---------------|
| Complete/ substantially complete                       | 7.81          | 4.63          | 6.59          | 8.08          | 4.25          | 7.49          |
| Substantial - vast majority definable                  | 10.76         | 12.96         | 20.88         | 23.23         | 25.47         | 27.75         |
| Some definable features                                | 14.35         | 20.37         | 13.74         | 15.49         | 27.36         | 15.86         |
| Traces/ barely visible - no definable features         | 10.76         | 15.74         | 15.38         | 13.13         | 11.32         | 12.78         |
| All above ground features removed - no visible remains | 22.57         | 30.56         | 23.63         | 21.89         | 19.81         | 25.55         |
| Survival not certain - no visible remains              | 33.76         | 15.74         | 19.78         | 18.18         | 11.79         | 10.57         |
| <b>Total</b>   | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |

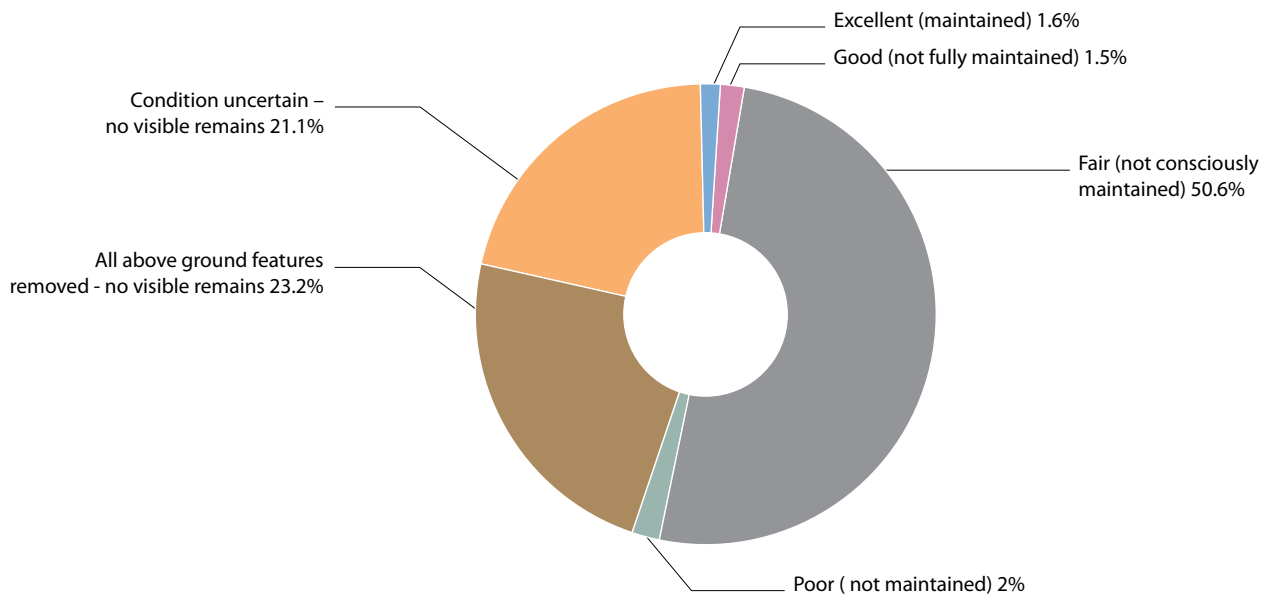
The fifth survival category is composed of sites that have had all of their above ground features removed. Sites such as these make up 23.2% (348) of the sample. They are sites which have suffered most as a result of adverse practices or deliberate destruction resulting in the complete removal of all visible remains. However many of the sites in this 23.2% are likely to have substantial below ground remains surviving.

A further 21.1% of sites have no visible remains and the extent of their survival is less certain than group five. Further detailed study of these sites through geophysical survey and test excavation is necessary to reveal their archaeological significance and extent and to inform future land management strategies.

## 6.4 CONDITION

Like survival, the condition of sites across Northern Ireland varies considerably (Figure 5).

**Figure 5 Relative condition of archaeological sites in Northern Ireland (see also Table 12)**



The condition of each monument visited was determined on the basis of whether or not the monument was maintained and also whether or not it was judged to be stable (Table 12). While 'survival' is an assessment of the quantity of remains, 'condition' is an assessment of current stability, regardless of how much of it survives. For example, a rath which has been largely ploughed out in the past would be assigned to the 'traces/barely visible - no definable features' category, but could be considered to be in 'fair (not maintained)' condition if it was now deemed to be stable and no longer eroding or under threat.

A small percentage of sites (3.1%) are formally maintained to some degree. These include those which are actively managed with the explicit aim of conserving them such as State Care Monuments (Plate 5). Partially maintained sites can include Scheduled Monuments or others that are subject to a Management Agreement between their owners and NIEA or DARD and are generally well cared for. A site might also be described as 'not

**Table 12 Numbers and percentages of sites in the various condition categories in Northern Ireland**

| Condition  | No.of sites | % Total    |
|--|-------------|------------|
| Excellent (maintained)                                 | 24          | 1.6        |
| Good (not fully maintained)                            | 23          | 1.5        |
| Fair (not consciously maintained)                      | 759         | 50.6       |
| Poor (not maintained)                                  | 30          | 2          |
| All above ground features removed - no visible remains | 348         | 23.2       |
| Condition uncertain – no visible remains               | 316         | 21.1       |
| <b>Total</b>   | <b>1500</b> | <b>100</b> |

fully maintained' if it is included in a maintenance programme for reasons other than the conservation of the monument. Typical of this would be at churches and graveyard sites which contain earlier elements, such as a ruined medieval church or a carved cross and the graveyard is maintained by a local Council. The maintenance of the graveyard could, but rarely does, involve, taking care of the earlier historic structures.

A small proportion of the sample (2%: 30 sites) was recorded as being in poor condition at the time of survey. These were sites that were unstable, and the fabric of the monument was being actively damaged (Plate 6). Sites were only classed as being in a poor condition when the damage was severe and required urgent remedial action, or where the remains seemed likely to further deteriorate rapidly, potentially resulting in much greater loss.



**Plate 5 Monea Castle (FER 191:061) is a State Care Monument, and is maintained to allow public access. It has recently undergone a programme of conservation work by NIEA.**

Table 13 shows the condition of sites in each county. There are regional variations in the condition of sites with County Fermanagh and County Tyrone having the highest percentages of sites that were in excellent to fair condition with corresponding low percentages of sites in poor condition. County Antrim has the lowest percentage in the excellent to fair condition categories (42.8%), and a corresponding high number of sites in the poor condition categories. Counties Antrim (50%) and Armagh (57.17%) have the highest percentages of sites in 'poor' to 'no visible remains' categories, figures that accord well with previous map-based counts<sup>48</sup>.

There are variations in the percentages of site that have no visible remains and where an assessment of condition is uncertain. While County Antrim has the lowest percentage of sites in excellent to fair condition, it also has the highest percentage (33.8%) of sites with no visible remains. It may be the case that the sites with no visible remains are in fact in good condition, surviving with extensive buried archaeological remains, but this could not be demonstrated during the survey. Such knowledge gaps underline the importance of further field survey, including trial excavations and geophysical surveys, in providing greater certainty in quantifying the archaeological resource.



**Table 13 Percentages of sites in each county classified according to their condition.**

| Condition  | ANT%          | ARM%          | DOW%          | LDY%          | FER%          | TYR%          |
|--|---------------|---------------|---------------|---------------|---------------|---------------|
| Excellent (maintained)                                 | 0.42          | 0.93          | 2.20          | 4.38          | 0.47          | 1.32          |
| Good (not fully maintained)                            | 1.48          | 1.85          | 2.75          | 1.68          | 0.94          | 0.88          |
| Fair (not maintained)                                  | 40.93         | 47.22         | 50.00         | 50.84         | 65.09         | 59.03         |
| Poor (not maintained)                                  | 0.84          | 3.70          | 1.65          | 3.03          | 1.89          | 2.64          |
| All above ground features removed - no visible remains | 22.57         | 30.56         | 23.63         | 21.89         | 19.81         | 25.55         |
| Condition uncertain – no visible remains               | 33.76         | 15.74         | 19.78         | 18.18         | 11.79         | 10.57         |
| <b>Total</b>   | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> | <b>100.00</b> |



## 6.5 SURVIVAL AND CONDITION OF SITES IN EACH LAND USE CATEGORY

### 6.5.1 Land use and the survival of sites

Table 14 illustrates the survival of the sites in each of the main categories of land use. Overall, 43.2% of the CAMSAR sample falls into the top three survival categories. Some significant patterns have emerged, and it has been demonstrated that the survival rates vary considerably depending on land use. The percentage of sites which fall into the top three survival categories ranges from 75% within boundaries, to 13% on arable land. Significant proportions of sites in woodland, unimproved grassland and wetland (74%, 65% and 53% respectively) also fall within these survival categories.

As with sites on arable land, however, those on developed land and improved grassland are less likely to have survived either as complete examples or in good condition. It was not surprising that lands included within the most potentially destructive land-management processes had the fewest surviving percentages of sites or monuments.

**Table 14 Percentage survival of sites in each land use category. Land use categories with less than 20 individual sites have been included in the 'Other' category.**

| Land use                             | Complete/<br>substantially<br>complete | Substantial -<br>vast majority<br>definable | Some<br>definable<br>features | Traces/barely<br>visible -<br>no definable<br>features | All above<br>ground<br>features<br>removed -<br>no visible<br>remains | Survival<br>uncertain -<br>no visible<br>remains | Total  |
|--------------------------------------|--|---|-------------------------------|--|---|--|--------|
| Improved<br>grassland                | 5.91                                   | 7.09  | 7.87                          | 17.52  | 34.06   | 27.56  | 100.00 |
| Unimproved<br>grassland              | 10.23                                  | 26.14                                       | 28.41                         | 7.95   | 12.50   | 14.77  | 100.00 |
| Arable                               | 2.22                                   | 8.89  | 2.22                          | 15.56  | 35.56   | 35.56  | 100.00 |
| Wetland                              | 4.57                                   | 21.71                                       | 26.86                         | 8.57   | 9.71  | 28.57  | 100.00 |
| Development                          | 10.47                                  | 13.57                                       | 12.02                         | 9.69   | 38.76   | 15.50  | 100.00 |
| Boundaries                           | 18.75                                  | 28.13                                       | 28.13                         | 9.38   | 3.13  | 12.50  | 100.00 |
| Woodland                             | 8.81                                   | 38.34                                       | 26.42                         | 6.22   | 9.33  | 10.88  | 100.00 |
| Improved<br>grassland,<br>Boundaries | 3.85                                   | 7.69  | 42.31                         | 38.46  | 3.85  | 3.85   | 100.00 |
| Improved<br>grassland,<br>Woodland   | 6.06                                   | 33.33                                       | 39.39                         | 9.09   | 3.03  | 9.09   | 100.00 |
| Unimproved<br>grassland,<br>Woodland | 3.28                                   | 73.77                                       | 18.03                         | 4.92   | 0.00  | 0.00   | 100.00 |
| Other                                | 1.23                                   | 14.81                                       | 19.75                         | 17.28  | 12.35   | 34.57  | 100.00 |

### 6.5.2 Land use and condition

Table 15 shows the condition of sites in each of the 10 main categories of land use. The results are similar to those of survival rates and land use with the greatest proportion of sites in the top three condition categories being 'boundaries' (84%), 'woodland' (78%) and 'unimproved grassland' (70%). 'Wetland' has 61% of sites in the top three categories, but sites in fair to excellent condition were fewer in 'development' (44%), 'improved grassland' (37%) and 'arable' (22%) land uses. Sites on undeveloped or unimproved land are therefore more likely to be in a better condition than sites on land which has undergone a change of use. Land classified as 'development' also has the greatest proportion of its sites in the 'all above ground features removed – no visible remains' category (38.76%). 'Improved grassland' (34%) and 'arable' land (36%) also have significant numbers of sites where all above ground features have been removed.

**Table 15 Percentages of sites comparing condition and land use. Land use categories with less than 20 individual sites have been included in 'Other'.**

| Land use                       | Excellent, maintained | Good, not fully maintained | Fair, not maintained | Poor, not maintained | All above ground features removed - no visible remains | Condition uncertain - no visible remains | Total  |
|--------------------------------|-----------------------|----------------------------|----------------------|----------------------|--|--|--------|
| Improved grassland             | 0.00                  | 0.20                       | 37.01                | 1.18                 | 34.06  | 27.56                                    | 100.00 |
| Unimproved grassland           | 0.00                  | 2.27                       | 68.18                | 2.27                 | 12.50  | 14.77                                    | 100.00 |
| Arable                         | 0.00                  | 0.00                       | 22.22                | 6.67                 | 35.56  | 35.56                                    | 100.00 |
| Wetland                        | 0.57                  | 0.00                       | 60.00                | 1.14                 | 9.71   | 28.57                                    | 100.00 |
| Development                    | 8.14                  | 6.20                       | 29.46                | 1.94                 | 38.76  | 15.50                                    | 100.00 |
| Boundaries                     | 0.00                  | 0.00                       | 84.38                | 0.00                 | 3.13   | 12.50                                    | 100.00 |
| Woodland                       | 0.52                  | 1.04                       | 76.68                | 1.55                 | 9.33   | 10.88                                    | 100.00 |
| Improved grassland, Boundaries | 0.00                  | 3.85                       | 88.46                | 0.00                 | 3.85   | 3.85                                     | 100.00 |
| Improved grassland, Woodland   | 0.00                  | 3.03                       | 84.85                | 0.00                 | 3.03   | 9.09                                     | 100.00 |
| Unimproved grassland, Woodland | 1.64                  | 0.00                       | 91.80                | 6.56                 | 0.00   | 0.00                                     | 100.00 |
| Other                          | 0.00                  | 0.00                       | 46.91                | 6.17                 | 12.35  | 34.57                                    | 100.00 |

## 6.6 SURVIVAL AND CONDITION OF SITES AS A FACTOR OF STRUCTURAL TYPE

### 6.6.1 Structural type and survival

In general, it can now be confidently stated that, where a site has survived to the present day, sites or monuments composed of stone, whether dry-stone, masonry or carved stone, survive better than those of earth or organic material (Table 16). Some 17% of earthworks survived as ‘traces/barely visible – no definable features’, while only 2% of masonry structures were in this category.

**Table 16 Percentage survival of sites in each structural category. Categories with less than 20 individual sites are included in ‘Other’.**

| Structural category                        | Complete/<br>substantially<br>complete | Substantial<br>- vast<br>majority<br>definable | visible -<br>Some<br>definable<br>features | Traces/<br>barely<br>features<br>no<br>definable<br>features | All above<br>ground<br>Survival<br>removed -<br>no visible<br>remains | uncertain -<br>no visible<br>remains | Total  |
|--|--|--|--|--|---|--------------------------------------|--------|
| Orthostatic monuments                      | 21.52                                  | 25.95  | 18.99                                      | 2.53   | 25.95   | 5.06                                 | 100.00 |
| Piled stone structures                     | 3.53                                   | 17.65  | 17.65                                      | 12.94  | 29.41   | 18.82                                | 100.00 |
| Earthworks                                 | 2.62                                   | 19.19  | 17.34                                      | 16.68  | 23.23   | 20.94                                | 100.00 |
| Freshwater structures                      | 3.23                                   | 19.35  | 19.35                                      | 11.29  | 12.90   | 33.87                                | 100.00 |
| Masonry structures                         | 18.52                                  | 14.07  | 13.33                                      | 2.22   | 24.44   | 27.41                                | 100.00 |
| Carved stone                               | 28.57                                  | 38.10  | 4.76                                       | 4.76   | 9.52  | 14.29                                | 100.00 |
| Miscellaneous                              | 5.13                                   | 2.56   | 7.69                                       | 7.69   | 15.38   | 61.54                                | 100.00 |
| Burial/burial mound                        | 4.00                                   | 16.00  | 8.00                                       | 8.00   | 24.00   | 40.00                                | 100.00 |
| Masonry structures,<br>Burial/burial mound | 4.00                                   | 32.00  | 24.00                                      | 4.00   | 28.00   | 8.00                                 | 100.00 |
| Other                                      | 18.18                                  | 15.15  | 27.27                                      | 9.09   | 21.21   | 9.09                                 | 100.00 |

### 6.6.2 Structural type and condition

Threats to the condition of a monument will vary depending on its structural composition, and its sensitivity to different types of damage. Table 17 shows the percentage of the main structural types in each of the condition categories. Carved stone monuments have the greatest percentage (76%) in the top three condition categories, with ‘orthostatic’ (67%) and ‘masonry structure and burial/burial mound’ (64%) well represented as being in fair to excellent condition. The ‘earthwork’ (53%), ‘freshwater’, (53%) ‘piled stone’ (51%) and ‘masonry’ (48%) structural categories have similar percentages in the top three condition categories.

**Table 17 Percentages of sites comparing structural type and condition. Categories with less than 20 individual sites have been included in 'Other'.**

| Structural category                     | Excellent, maintained | Good, not fully maintained | Fair, not maintained | Poor, not maintained | All above ground features removed - no visible remains | Condition uncertain - no visible remains | Total  |
|---|-----------------------|----------------------------|----------------------|----------------------|--|--|--------|
| Orthostatic monuments                   | 0.63                  | 0.63                       | 65.82                | 1.90                 | 25.95  | 5.06                                     | 100.00 |
| Piled stone structures                  | 2.35                  | 0.00                       | 48.24                | 1.18                 | 29.41  | 18.82                                    | 100.00 |
| Earthworks                              | 0.44                  | 0.33                       | 52.24                | 2.84                 | 23.23  | 20.94                                    | 100.00 |
| Freshwater structures                   | 0.00                  | 0.00                       | 53.23                | 0.00                 | 12.90  | 33.87                                    | 100.00 |
| Masonry structures                      | 10.37                 | 5.19                       | 32.59                | 0.00                 | 24.44  | 27.41                                    | 100.00 |
| Carved stone                            | 0.00                  | 4.76                       | 71.43                | 0.00                 | 9.52   | 14.29                                    | 100.00 |
| Miscellaneous                           | 0.00                  | 0.00                       | 23.08                | 0.00                 | 15.38  | 61.54                                    | 100.00 |
| Burial/burial mound                     | 0.00                  | 8.00                       | 28.00                | 0.00                 | 24.00  | 40.00                                    | 100.00 |
| Masonry structures, Burial/burial mound | 0.00                  | 28.00                      | 36.00                | 0.00                 | 28.00  | 8.00                                     | 100.00 |
| Other                                   | 9.09                  | 6.06                       | 54.55                | 0.00                 | 21.21  | 9.09                                     | 100.00 |

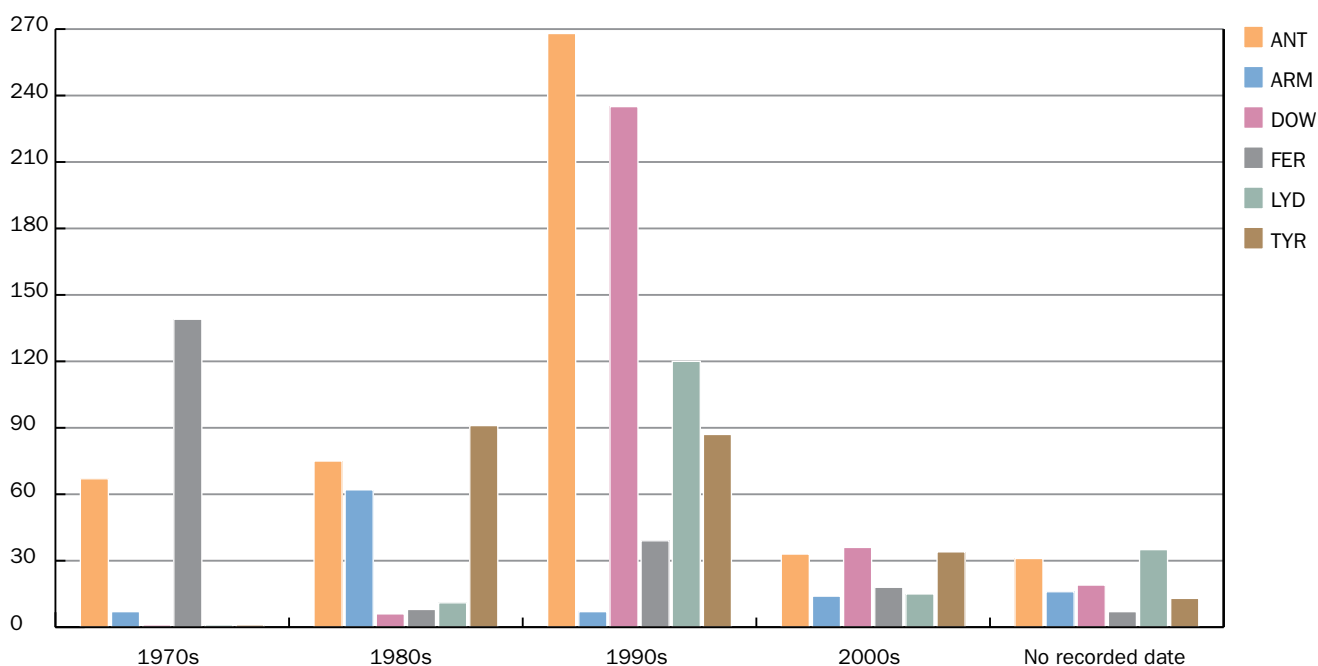
## 6.7 CHANGES OVER TIME

An important objective of the CAMSAR project was to establish a baseline of data, gathered at a consistent and standardised level, to provide comparative information for future studies of this kind. The records made in the CAMSAR survey were developed with a view to using them in future analysis. The project achieved this goal, and has established a reliable baseline for future study of archaeological field monuments in Northern Ireland. The survival and management of these sites is acutely related to land use policies and particularly changes in the Common Agricultural Policy and market forces on food production.

As previously noted, some records were available about the condition of sites in the past (i.e. their condition when initially surveyed by archaeologists or when inspected by field monument wardens). In many cases, however, detailed comparison with previous records was not possible as the kind of information recorded in the CAMSAR project had not always been documented in earlier records (see Figure 6, and Tables 18 and 19). The most recent field records of the 1990s were the most useful for the purposes of comparison, reflecting the strong change in thinking from academic recording between the 1950s and 1970s to recording against a background of major land use change.

Table 19 shows the percentage of sites in each county where it was possible to estimate deterioration between the information contained in the NISMR and the period of the CAMSAR survey. County Fermanagh has the greatest percentage of sites (9%) which have deteriorated since the previous visit. Fermanagh is also the county with the best survival and condition rates

**Figure 6 Relative levels of site inspections at historic monuments since the 1970s (see also Table 18).**



**Table 18 Numbers of CAMSAR sample sites visited in each county by NIEA archaeologists and field monument wardens by decade.**

| Survival         | ANT%       | ARM%       | DOW%       | LDY%       | FER%       | TYR%       |
|------------------|------------|------------|------------|------------|------------|------------|
| 1930s            | 0          | 0          | 0          | 1          | 0          | 0          |
| 1960s            | 0          | 2          | 0          | 0          | 0          | 1          |
| 1970s            | 67         | 7          | 1          | 139        | 1          | 1          |
| 1980s            | 75         | 62         | 6          | 8          | 11         | 91         |
| 1990s            | 268        | 7          | 235        | 39         | 120        | 87         |
| 2000s            | 33         | 14         | 36         | 18         | 15         | 34         |
| No recorded date | 31         | 16         | 19         | 7          | 35         | 13         |
| <b>Total</b>     | <b>474</b> | <b>108</b> | <b>297</b> | <b>212</b> | <b>182</b> | <b>227</b> |

recorded during the CAMSAR project, and at first glance it was surprising that this county should have the highest percentage of deteriorating sites. However, on consideration it can be seen that a well preserved site is more prone to damage or deterioration and to measured change, and this will account for the higher figure for the county reflecting the overall general trend in cattle and sheep levels before CAP reform.

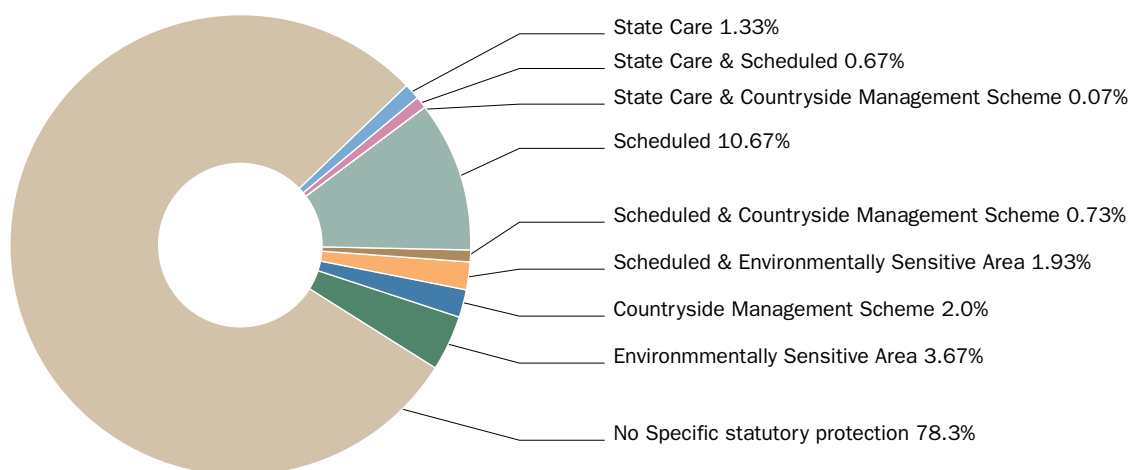
**Table 19 Numbers of sites in each county that had deteriorated since they were last inspected.**

| Deteriorated since previous visit | ANT        | ARM        | LDY        | DOW        | FER        | TYR        | Total       |
|-----------------------------------|------------|------------|------------|------------|------------|------------|-------------|
| No deterioration                  | 440        | 97         | 180        | 286        | 185        | 213        | 1401        |
| Uncertain                         | 7          | 2          | 2          | 2          | 7          | 6          | 26          |
| Deteriorated                      | 27         | 9          | 0          | 9          | 20         | 8          | 73          |
| <b>Total</b>                      | <b>474</b> | <b>108</b> | <b>182</b> | <b>297</b> | <b>212</b> | <b>227</b> | <b>1500</b> |

## 6.8 THE SURVIVAL AND CONDITION OF PROTECTED SITES

The CAMSAR project included State Care and Scheduled Monuments in the statistical sample. At the time of the survey, just over 1700 sites were scheduled under the provisions of the Historic Monuments and Archaeological Objects (NI) Order 1995<sup>49</sup> and 181 were in State Care. The condition of Scheduled Monuments is monitored through inspection on a three to four year cycle by four field monument wardens who also negotiate management agreements for improvement to condition of monuments where necessary. State Care sites are monitored regularly and issues affecting their condition are attended to. Protection is also afforded to other sites and monuments through the agri-environment schemes implemented by the DARD (Figure 7). Protection for archaeological sites in the context of development is provided by Planning Policy Statement 6.

**Figure 7 Proportions of monuments with no protection, statutory protection or included in time-bound DARD management schemes.**



In total, 319 sites (21.3%) out of the sample are covered by one or more of the methods of protection (Table 20). The CAMSAR sample has a higher percentage of protected sites compared to that for the total of sites in the NISMR. This is because the survey did not include unlocated sites or sites that were previously identified as monuments but subsequently found not

**Table 20 Statutory and policy protection for historic monuments within the CAMSAR sample. Just less than 15% are protected either as State Care Monuments or Scheduled Historic Monuments.**

| Protection Category                        | No. of sites | % of total |
|--|--------------|------------|
| No specific statutory protection           | 1181         | 78.73      |
| State Care                                 | 20           | 1.33       |
| State Care & scheduled                     | 10           | 0.67       |
| State Care & Countryside Management Scheme | 1            | 0.07       |
| Scheduled                                  | 160          | 10.67      |
| Scheduled & Countryside Management Scheme  | 11           | 0.73       |
| Scheduled & Environmentally Sensitive Area | 29           | 1.93       |
| Countryside Management Scheme              | 30           | 2          |
| Environmentally Sensitive Area             | 58           | 3.87       |
| <b>Total</b>                               | <b>1500</b>  | <b>100</b> |

to have been archaeological features. These kinds of sites are included in the NISMR to prevent having to assess them again in the future as they are typically reported by interested members of the public.

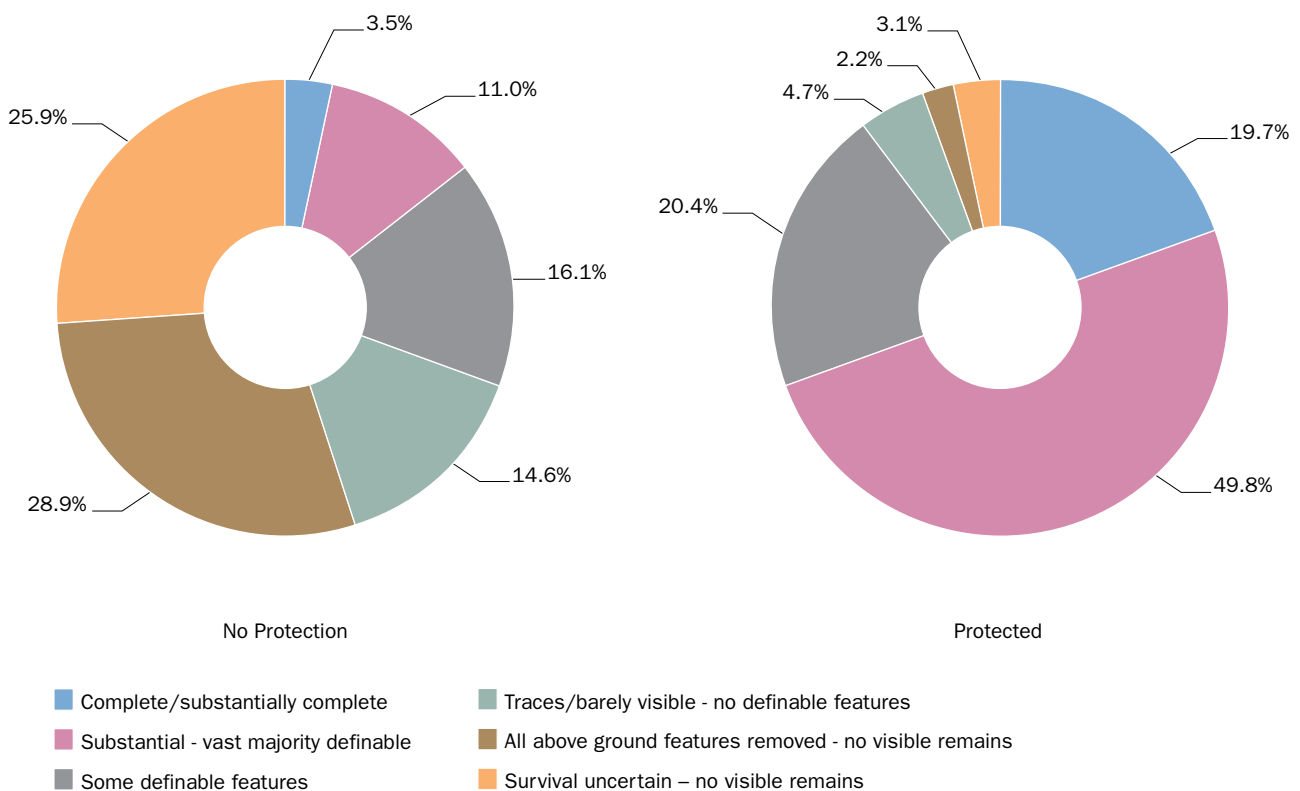
The total percentage of CAMSAR sample sites in each county with statutory protection or agri-environment agreement is shown in Table 21. Scheduling protects the largest number of sites (14%), many are included in agri-environment schemes (8.6%), while significantly fewer are in State Care (2.1%). The small number in State Care is reflective of the archaeological resource generally for Northern Ireland as a whole with only around 1% of the overall number of sites and monuments in State Care. There are significant variations between counties in the numbers of sites that have statutory or DARD agreement protection. The high percentages of sites in agri-environment schemes in counties Fermanagh (19%) and Tyrone (14.5%), for example, contrast with the much smaller percentage in County Antrim (4%) and probably reflect the voluntary aspect of these initiatives as well as the survival rates of monuments as noted above.

**Table 21 Protection percentages of sample sites in each county.**

|                  | ANT        | ARM        | LDY        | DOW        | FER        | TYR        | Total       |
|------------------|------------|------------|------------|------------|------------|------------|-------------|
| No deterioration | 440        | 97         | 180        | 286        | 185        | 213        | 1401        |
| Uncertain        | 7          | 2          | 2          | 2          | 7          | 6          | 26          |
| Deteriorated     | 27         | 9          | 0          | 9          | 20         | 8          | 73          |
| <b>Total</b>     | <b>474</b> | <b>108</b> | <b>182</b> | <b>297</b> | <b>212</b> | <b>227</b> | <b>1500</b> |

Figure 8 illustrates very well the difference between protected and unprotected sites reflecting the care and effort made by NIEA, DARD and

**Figure 8 A comparison within the CAMSAR sample between unprotected and protected sites.**



**Table 22 The survival within the CAMSAR sample between unprotected and protected sites.**

| Survival   | No. of sites with no protection | No. of protected sites | % of sites with no protection | % of protected sites |
|--|---------------------------------|------------------------|-------------------------------|----------------------|
| Complete/substantially complete                        | 41                              | 63                     | 3.5                           | 19.7                 |
| Substantial - vast majority definable                  | 130                             | 159                    | 11                            | 49.8                 |
| Some definable features                                | 190                             | 65                     | 16.1                          | 20.4                 |
| Traces/barely visible - no definable features          | 173                             | 15                     | 14.6                          | 4.7                  |
| All above ground features removed - no visible remains | 341                             | 7                      | 28.9                          | 2.2                  |
| Survival uncertain - no visible remains                | 306                             | 10                     | 25.9                          | 3.1                  |
| <b>Total</b>   | <b>1181</b>                     | <b>319</b>             | <b>100</b>                    | <b>100</b>           |

landowners. The data indicates a probable bias towards protecting sites with at least some upstanding, recognisable features, and this is not unexpected in the overall land management context. These are more likely to be recognised by owners and farm inspectors and readily included as part of an agreement with DARD than sites identified by aerial photographs (which usually have no upstanding remains and landowners are frequently surprised to hear they have an archaeological site on their land) or the site of a destroyed monument. Almost 90% of protected sites have at least some definable features, compared with around 31% for sites which are not yet protected.

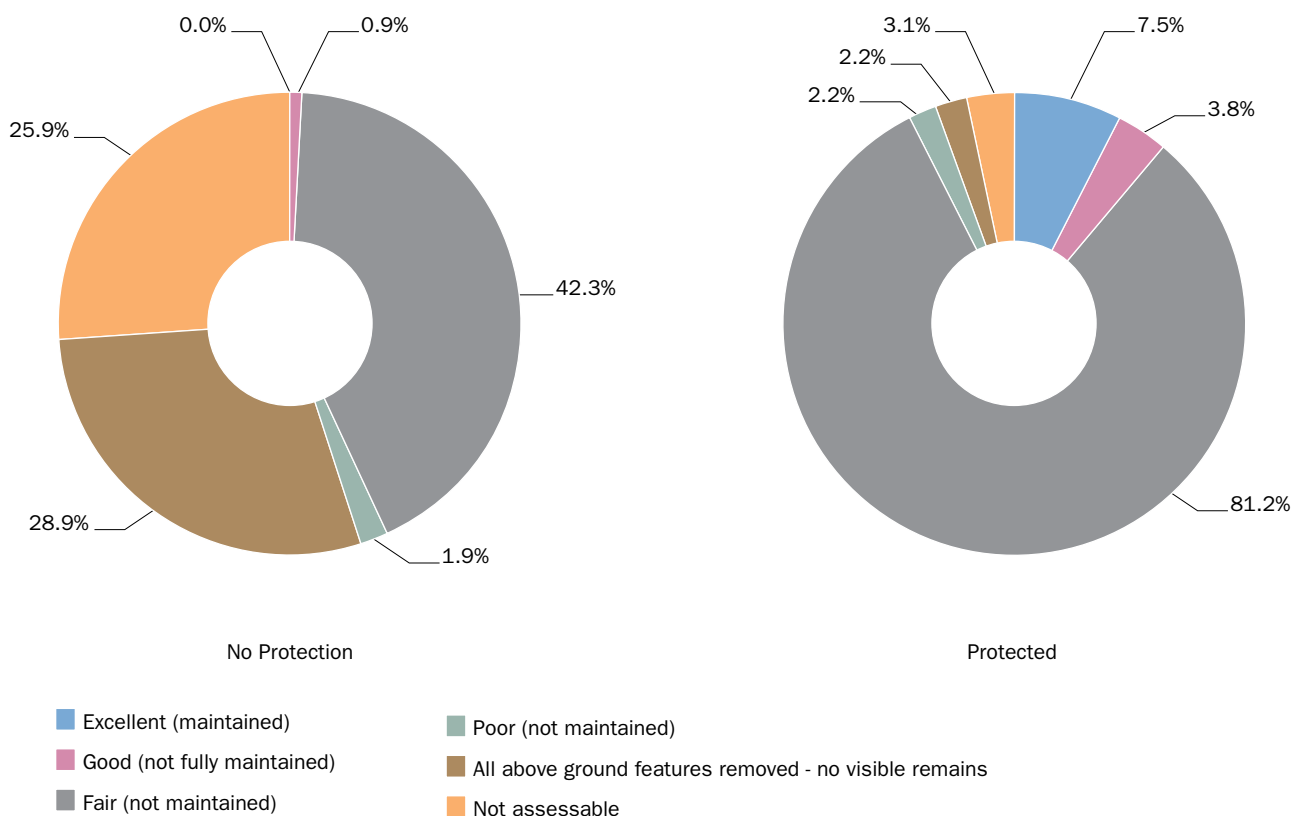
Similar data is presented in Table 22, which can be used to compare the relative survival between sites that have protection and those which do not.

Figure 10 illustrates the comparison between the condition of protected and unprotected sites. When the top three categories (fair to excellent condition) are considered together, it is apparent that protected sites (over 92% are recognised as in fair to excellent condition) are likely to be in better condition than those that are not protected (42% in this condition category). Statutory protection, and the planned management and monitoring that this protection offers, clearly benefits the archaeological resource. A similar comparison is presented in Table 23.

An anomaly in the figures exists, however, and this requires an explanation. Of the protected sites, 2.2% were described as being in 'poor' condition, compared to 1.9% of unprotected sites. This may be, in part, because a much higher percentage (almost 55%) of unprotected sites had no visible remains, compared to just 5% of protected sites (which were generally sites with inherently underground remains such as souterrains). Given that there were, in percentage terms, more upstanding remains at protected sites than unprotected sites it was therefore possible to provide a better judgement about their condition.



**Figure 10 A comparison of the condition of monuments in the CAMSAR sample between unprotected and protected sites.**



**Table 23 Condition of protected and unprotected sites in the CAMSAR sample.**

| Survival   | No. of sites with no protection | No. of protected sites | % of sites with no protection | % of protected sites |
|--|---------------------------------|------------------------|-------------------------------|----------------------|
| Excellent (maintained)                                 | 0                               | 24                     | 0                             | 7.5                  |
| Good (not fully maintained)                            | 11                              | 12                     | 0.9                           | 3.8                  |
| Fair (not maintained)                                  | 500                             | 259                    | 42.3                          | 81.2                 |
| Poor (not maintained)                                  | 23                              | 7                      | 1.9                           | 2.2                  |
| All above ground features removed - no visible remains | 341                             | 7                      | 28.9                          | 2.2                  |
| Condition uncertain – no visible remains               | 306                             | 10                     | 25.9                          | 3.1                  |
| <b>Total</b>   | <b>1181</b>                     | <b>319</b>             | <b>100</b>                    | <b>100</b>           |

Table 24 presents a breakdown of the numbers of sites included in each condition category according to their protection status. As indicated in the table, a total of 30 sites was described as being in poor condition, of which 23 were not subject to any special protection, and five of which were statutorily protected (one in State Care, four scheduled), with a further two sites included in an agri-environment scheme. Plate 7 illustrates two examples which were found to be in a poor condition.

**Table 24 The condition of sites in each of the protection categories in the CAMSAR sample.**

| Condition  | No specific protection | State Care | State Care & Agri-environmental scheme | State Care & scheduled | Scheduled  | Agri-environmental scheme | Scheduled & agri-scheme | Total       |
|--|------------------------|------------|--|------------------------|------------|---------------------------|-------------------------|-------------|
| Excellent (maintained)                                 | 0                      | 15         | 0                                      | 7                      | 2          | 0                         | 0                       | 24          |
| Good (not fully maintained)                            | 11                     | 1          | 0                                      | 0                      | 11         | 0                         | 0                       | 23          |
| Fair (not maintained)                                  | 500                    | 3          | 1                                      | 2                      | 138        | 77                        | 38                      | 759         |
| Poor (not maintained)                                  | 23                     | 0          | 0                                      | 1                      | 4          | 2                         | 0                       | 30          |
| All above ground features removed - no visible remains | 341                    | 0          | 0                                      | 0                      | 0          | 6                         | 1                       | 348         |
| Condition uncertain - no visible remains               | 306                    | 1          | 0                                      | 0                      | 5          | 3                         | 1                       | 316         |
| <b>Total</b>   | <b>1181</b>            | <b>20</b>  | <b>1</b>                               | <b>10</b>              | <b>160</b> | <b>88</b>                 | <b>40</b>               | <b>1500</b> |



**Plate 7 (left) Clonlum court tomb (ARM 029:004) is in a poor condition due to scrub growth and severe livestock trampling. (right) The possible raised rath at Fofannyreagh (DOW 042 038) is in poor condition due to a combination of livestock erosion and burrowing animals.**

## 6.9 FENCING

Fencing can protect sites from potential animal damage but can also encourage scrub growth if it prevents occasional grazing. Fencing was recorded during the survey to test the effects in preventing agricultural wear and tear (Table 25).

**Table 25 Percentage of fenced and unfenced sites in each county in the CAMSAR sample.**

| Site fenced? | ANT%  | ARM%  | DOW%  | FER%  | LDY%  | TYR%  | Total |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| No           | 95.78 | 94.44 | 93.27 | 95.75 | 93.96 | 89.87 | 94.07 |
| Yes          | 4.22  | 5.56  | 6.73  | 4.25  | 6.04  | 10.13 | 5.93  |

Some 89 of the sample sites (5.93%) were fenced off from the surrounding area. The percentages fenced off in each county varied quite considerably from 4.22% in Antrim and 4.25% in Fermanagh, to 10.13% in Tyrone.

All types of sites were found to have some kind of fencing around them, including round cairns, churches, graveyards, mottes, raths and megaliths. Most of these were monuments with upstanding remains, though some with less visible remains were also found to be enclosed by fencing. Over two thirds of the sites fenced were protected either as State Care or Scheduled Monuments or managed in agri-environment schemes.

**Table 26 Comparison of the condition of fenced and unfenced sites in the CAMSAR sample.**

| Condition   | No. of unfenced sites | No. of fenced sites | % of unfenced sites | % of fenced sites |
|---|-----------------------|---------------------|---------------------|-------------------|
| Excellent (maintained)                                | 4                     | 20                  | 0.3                 | 22.5              |
| Good (not fully maintained)                           | 8                     | 15                  | 0.6                 | 16.9              |
| Fair (not maintained)                                 | 706                   | 53                  | 50.0                | 59.6              |
| Poor (not maintained)                                 | 30                    | 0                   | 2.1                 | 0                 |
| All above ground remains removed - no visible remains | 348                   | 0                   | 24.7                | 0                 |
| Condition uncertain – no visible remains              | 315                   | 1                   | 22.3                | 1.1               |
| <b>Total</b>  | <b>1411</b>           | <b>89</b>           | <b>100</b>          | <b>100</b>        |

Table 26 show a comparison between the condition of fenced and unfenced sites, and shows that 99% percent of fenced sites fall into the top three condition categories, compared to 51% of unfenced sites. The condition of fenced sites is encouraging in terms of the success of this management method, and it should be noted that none of the fenced monuments were considered to be in a poor condition. This demonstrates that fencing works as a management tool in safeguarding archaeological remains.

On the other hand, in many cases it was found that where a site had been fenced-off to prevent further damage from, for example, cattle trampling, vegetation can rapidly engulf it unless it is also occasionally grazed. Of the 89 fenced sites 32 (35.95%) have been damaged recently, in most cases by scrub encroachment (Plate 8). This highlights the need for regular, but controlled grazing at such sites. NIEA and DARD management agreements routinely require the effective control of vegetation, with light grazing proposed as the most effective method. When this is not possible it is essential that vegetation is manually cleared to ground level every few years. Ballymarlagh dual court tomb (Plate 8), for example, was last cleared of scrub in 1995, but the monument was, at the time of the CAMSAR survey engulfed again with scrub vegetation, clearly indicating the importance of routine maintenance. Temporary electric fencing was not observed at any of the sites visited in the CAMSAR survey.



**Plate 8 (left) Derryhowlaght East rath (FER 230:055) and (right) Ballymarlagh dual court tomb (ANT 038:002) have both been fenced off from the surrounding field and are now extremely overgrown and difficult to access.**

## **6.10 DAMAGE**

All cases of damage observed during the survey were recorded (Figure 9), and the percentage of the surface area of each monument affected by the damage factor was assessed. In some cases damage can involve the large-scale or total loss of the fabric of the monument. In many more cases, however, damage is piecemeal, causing localised but measurable disturbance. However, the combination of a number of small-scale destructive events over time can eventually lead to the wholesale loss of a site.

Some forms of damage cannot be easily resolved at a site, even when they are recognised. For example, burrowing animals can essentially destroy much of the buried archaeology at a site by tunnelling and redistributing soil. This is particularly the case for burrowing badgers at or near a known monument. Indeed, the nature of some monuments – especially earthworks – is ideal for them. However, badgers have statutory protection (under the Wildlife (Northern Ireland) Order 1985 and its 1995 amendment), and their sets can only be closed under special license. Rabbits and foxes also frequently cause damage, particularly to earthworks, but it would not be possible or practical to remove them completely from archaeological sites.

### **6.10.1 Past damage**

Past damage was defined as that which could be estimated to have occurred more than five years before the survey commenced. A total of 882 (58.8%) of the sites that were visited were recorded as having been damaged in the past. Some sites had been damaged through a single type of action, whilst others had been affected by more than one type, and thus a total of 1030 instances of damage were recorded at these 882 sites.

**Figure 9 Distribution of sites which have been damaged.**

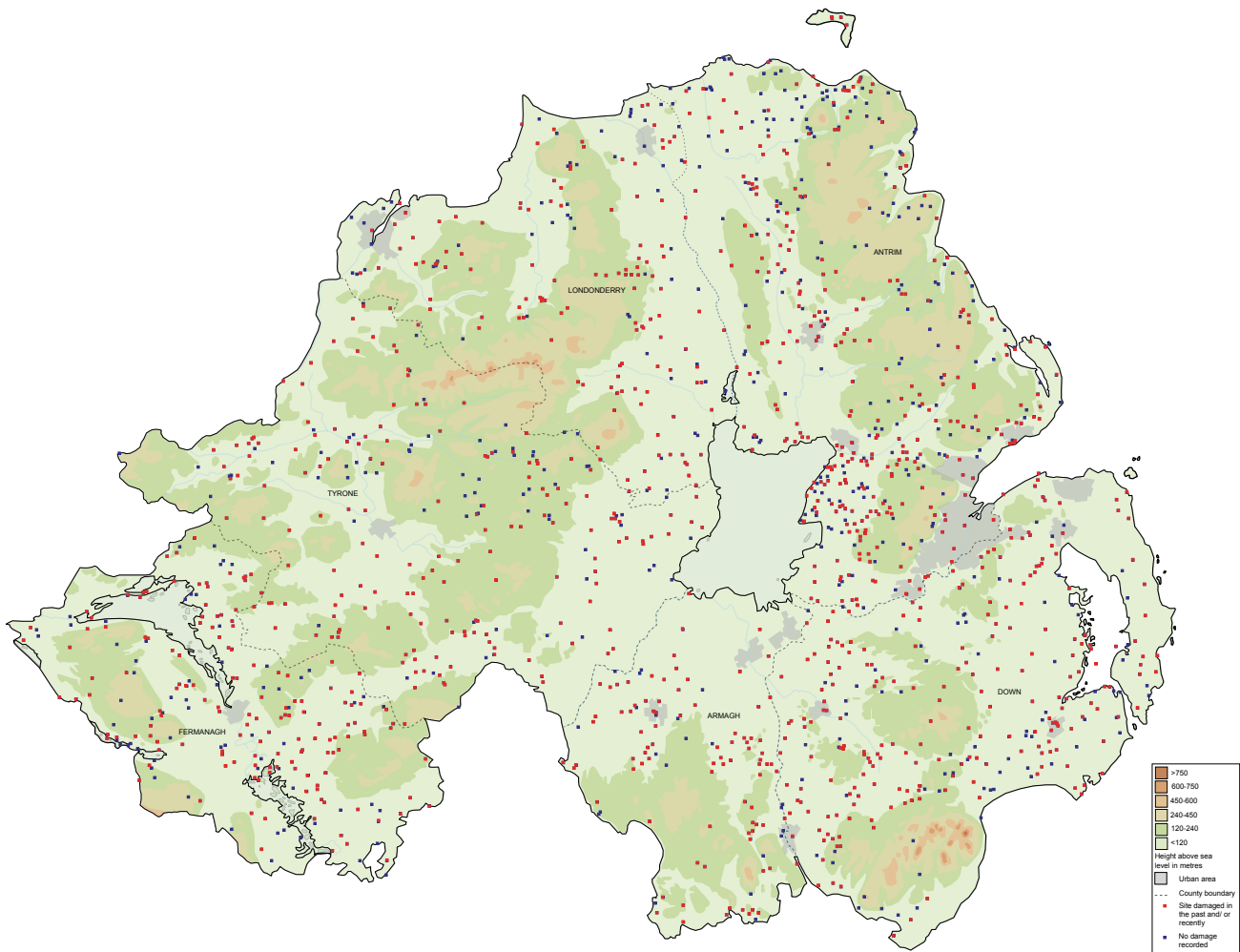


Table 27 shows the types of damage that had occurred in the past that were encountered during the survey and the number of instances recorded. The most frequent record was of 'removal', which accounted for just below 30% of sites visited. This may reflect the way in which the data were collected but is likely to reflect land improvement policies of the 1970s and 1980s before Common Agricultural Policy (CAP) Reform. In general, when a site has been damaged in the past, the cause of the damage is difficult to establish and such cases were recorded in the 'removal' category. More specific damage types were only recorded if the cause could be identified with relative certainty.

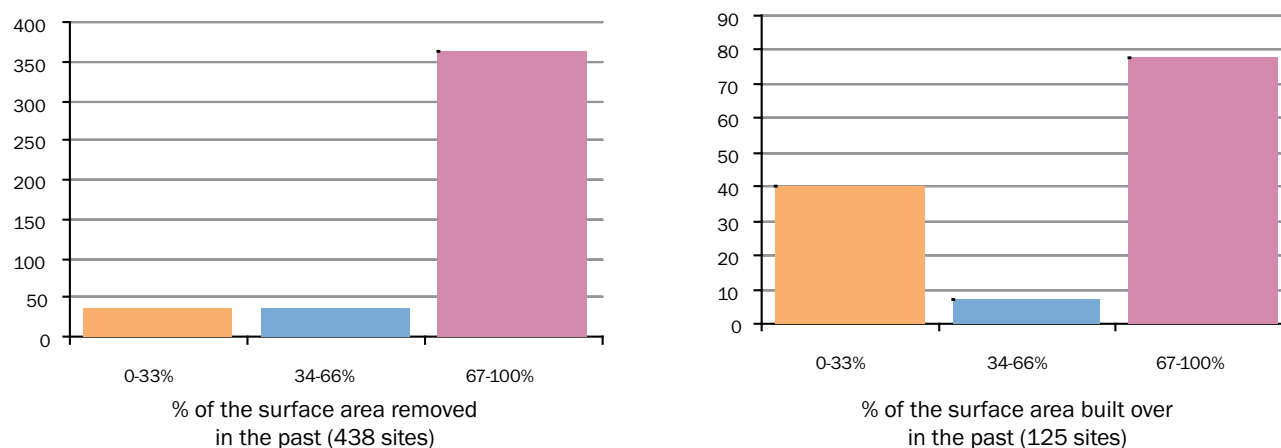
The percentage of the surface area of each monument which was damaged in the past varies considerably from localised removal of a part to total loss. Figure 11 shows the percentages of the surface area affected by 'removal' and 'building' in the past. There are 438 sites included in the 'removal' category, and of these 364 had between two-thirds and all of their surface area removed.

**Table 27 Instances of past damage recorded at 882 sites in the CAMSAR sample.**

| Past damage type             | Instances | Past damage type      | Instances |
|------------------------------|-----------|-----------------------|-----------|
| Removal                      | 438       | Wind, weather, time   | 13        |
| Building                     | 125       | Dumping               | 7         |
| Archaeological excavation*   | 83        | Badgers               | 7         |
| Cultivation                  | 78        | Collapse              | 6         |
| Tree planting                | 56        | Water troughs         | 5         |
| Improvements/landscaping     | 37        | Reclamation           | 4         |
| Scrub encroachment           | 37        | Visitors              | 4         |
| Mineral extraction/quarrying | 31        | Reseeding             | 4         |
| Livestock                    | 28        | Unstable/fallen trees | 4         |
| Overgrown                    | 23        | Agricultural traffic  | 3         |
| Roads                        | 19        | Vandalism             | 2         |
| Drainage                     | 14        | Rabbit burrowing      | 2         |

\*Archaeological excavation was included in this section to record the occurrence of this event which can have a significant impact on a monument as it removes portions in a controlled manner. Archaeological excavation is not 'damage', however, in the same sense as the other factors listed, as it is a scientific study intended to record the history and development of a monument. Reactive or rescue excavation, often conducted in advance of new built development, frequently results in the complete removal of the archaeological site and its contents.

**Figure 11 Percentage of the surface area affected by removal and building in the CAMSAR sample in the past.**



Building has affected 125 sites (8.3%) in the past, and such work can physically destroy a monument. In 78 of these cases between two-thirds and all of the surface area of the site was affected (Table 28). Building at archaeological sites is not confined to urban areas and, with a pattern of dispersed settlement, has frequently happened in the countryside (Plate 9). Of particular concern is the construction of farm buildings and access lanes.

**Table 28 Percentages of surface area in the CAMSAR sample affected in past damage by removal and building works**

| % of surface area affected | No. of sites damaged by removal | No. of sites damaged by building |
|----------------------------|---------------------------------|----------------------------------|
| 0-33%                      | 38                              | 40                               |
| 34-66%                     | 36                              | 7                                |
| 67-100%                    | 364                             | 78                               |

It was found that, apart from removal and building, sites had been damaged most often in the past by cultivation (5.2%), scrub encroachment and overgrowth (4%), tree planting (3.7%) and improvements and landscaping (2.5%).

### 6.10.2 Recent damage

Recent damage is defined as that which was thought to have occurred within the last five years, or which is current or ongoing. A total of 553 instances of recent damage at 397 sites were recorded during the fieldwork (Table 29), and the total number of sites recently damaged represents 26.47% of the survey sample. The survival figures were analysed in relation to recent damage to establish how many sites with significant upstanding remains



**Plate 9 Clockwise from left: Donaghadee motte (DOW 003:003) was damaged in the past by the construction of a powder magazine. Lisnagleer platform rath (TYR 046:018) was damaged by cultivation. Dundoonan rath and souterrain (LDY 003:014) was built over by a farmyard and buildings. Tree planting has damaged Dundermot motte (ANT 027:010).**

have been damaged in this time frame. Within the CAMSAR sample, 648 sites (43.2%) fall into the top three survival categories. 312 of these 648 sites – some 48.1% of the best surviving sites – had been damaged recently.

**Table 29 The instances of recent damage encountered at 397 sites in the CAMSAR sample.**

| Recent damage type    | Instances | Recent damage type           | Instances |
|-----------------------|-----------|------------------------------|-----------|
| Livestock             | 190       | Building                     | 6         |
| Scrub encroachment    | 81        | Visitors                     | 6         |
| Rabbit burrowing      | 68        | Improvements/landscaping     | 5         |
| Overgrown             | 45        | Mineral extraction/quarrying | 5         |
| Cultivation           | 36        | Drainage                     | 4         |
| Dumping               | 16        | Supplementary feeding sites  | 4         |
| Tree planting         | 16        | Archaeological excavation    | 4         |
| Badgers               | 16        | Water troughs                | 3         |
| Unstable/fallen trees | 16        | Reservoirs                   | 2         |
| Agricultural traffic  | 12        | Roads                        | 1         |
| Reseeding             | 9         | Removal                      | 1         |
| Wind, weather, time   | 7         |                              |           |

There were 190 instances of damage caused by livestock recorded, the highest single cause (in one-third of cases) of recent damage and almost 13% in the total sample. This type of damage is commonly found as deep trampling of the ground surface on or around a monument. This is usually manifested as soft, muddy, puddled ground leaving hoof impressions 10cm or more in depth. It threatens the integrity of archaeological layers, and if not checked and prevented leads to active erosion of a monument, usually earthworks but also orthostatic sites, sometimes to the point where stones fall over. Plate 10 illustrates an example of the damage that can occur. The weight of cattle trampling and rubbing at this vulnerable earthwork has resulted in the irreversible erosion of archaeological material.

**Figure 12 The percentage surface area at sites in the CAMSAR sample affected by livestock-related damage (190 sites).**

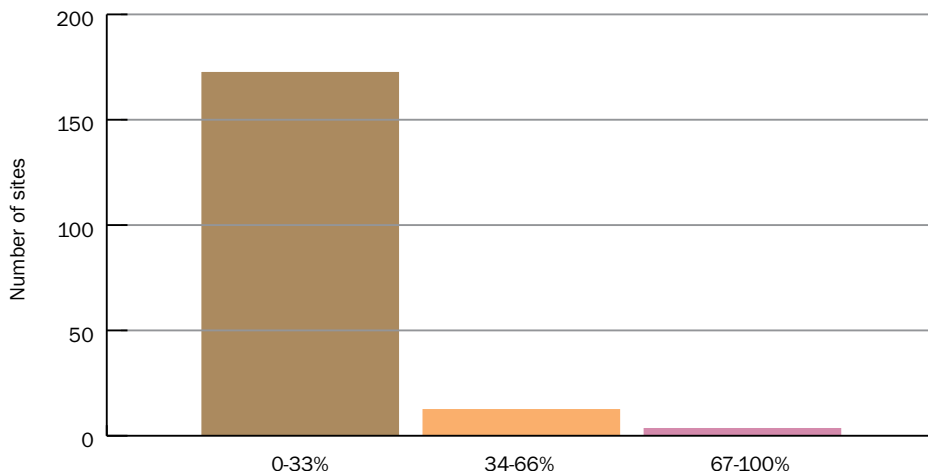




Figure 12 indicates the percentage of the surface area of each monument which has been affected by livestock damage. Of the 190 sites which have been damaged, 91% have had between 0% and 33% of the surface area of the monument affected. While livestock damage often affects proportionately less of the surface area of a monument than, for example, cultivation or building, the cumulative effect is equally destructive. While damage caused by livestock is frequently piecemeal, over time can result in the same level of damage as a single episode of building work.



**Plate 10 Mount Hamilton large enclosure (ANT 023:016) has been damaged by livestock recently.**

Scrub encroachment leading to overgrowth was also recorded as a problem. A total of 126 cases of this type of recent damage was noted, affecting 8% of the sample. This type of damage causes a number of problems. The most obvious is the harm caused to a monument by root penetration particularly on earthworks. Trees on or around structures and megalithic tombs are very destructive (Plate 11), causing disturbance of layers and even collapse. Excavation work at a prehistoric roundhouse on Dartmoor has also demonstrated the extent of the serious physical and chemical damage caused to archaeological remains by the root systems of bracken, which had displaced and damaged up to 20% of the archaeological deposits<sup>50</sup>. Scrub can also act as shading, preventing grass from growing and leading to soil



**Plate 11 Magherafelt church and graveyard (LDY 042:016), showing damage caused by root action. Bullock Park portal tomb (TYR 024:029) overgrown and damaged as a consequence of root action.**

erosion exacerbated by annual trampling and burrowing; this accounted for 15% of the recent damage encountered (Plates 12 and 13).

This damage can often be further extended when livestock are allowed access to the areas already exposed. Other types of recent damage encountered included cultivation (which accounted for 6.5% of the instances of damage), dumping (3%) and agricultural traffic (2%). Tree planting and the damage caused by the collapse of unstable and diseased trees blown down during gales accounts for almost 6% of the cases of recent damage. Archaeological layers are disturbed when the ground is prepared for tree planting, and growing tree roots will further disturb features and objects. When trees blow over they can lift large amounts of earth with their root-plates, leaving wide holes and further exposing that portion of a site to natural erosion (Plate 12).



**Plate 12** Examples of sites which were found to have been damaged recently.

Nearly three-quarters of the cases of recent damage can be attributed to two main causes: (a) activities associated with agricultural practices, such as damage by livestock, cultivation, reseeding, agricultural traffic and the inappropriate positioning of feeders and water troughs, which together accounted for 254 of the 553 instances of damage (i.e. 45.9%); and (b) management of vegetation at a site, including the generation of scrub, planting of new trees and trees being blown down, which together accounted for 158 (28.6%) instances of recent damage.

### **6.10.3 Recent damage and protection status**

A total of 319 sites in the sample are statutorily protected either by Scheduling, State Care or agri-environment schemes. Of these, 150 (47.02%) have suffered recent damage with 213 instances of recent damage recorded at these sites. Of the 1181 sites not statutorily protected, a total of 247 (20.91%) have been damaged recently.



Drummack rath (FER 230:062). The perimeter is overgrown with bushes and trees.



Dungonnell mound (ANT 054:008), where material has been dumped in the ditch to make it level with the surrounding ground.



The bank at Tullydonnell rath (ARM 031:003) has suffered from rabbit burrow damage.



Large enclosure at Mount Hamilton (ANT 023:016), recently damaged by livestock.

**Plate 13 Further examples of sites which were found to have been damaged recently.**

**Table 30 Percentages of each protection class which have been damaged recently.**

| Protection type                              | Total in sample | Total number damaged | % damaged |
|--|-----------------|----------------------|-----------|
| State Care                                   | 20              | 3                    | 15        |
| State Care & Countryside Management Scheme   | 1               | 0                    | 0         |
| State Care and scheduled                     | 10              | 2                    | 20        |
| Scheduled                                    | 160             | 85                   | 53        |
| Scheduled and Countryside Management Scheme  | 11              | 6                    | 55        |
| Scheduled and Environmentally Sensitive Area | 29              | 12                   | 41        |
| Countryside Management Scheme                | 30              | 21                   | 70        |
| Environmentally Sensitive Area               | 58              | 21                   | 36        |
| <b>Total</b>                                 | <b>319</b>      | <b>150</b>           | <b>47</b> |

This survey suggests in general that the survival rates for statutorily protected sites and sites that are not statutorily protected are usually quite different. For example, earthworks in good condition may be more likely to be recognised and subject to statutory protection. However, earthworks are actually some of the most vulnerable sites regardless of their management or protection status<sup>51</sup>.



**Plate 14 (left) Damage by visitors using a much worn path is causing erosion at Harryville motte and bailey (ANT 037:022), a State Care Monument. (right) Greenan platform rath (TYR 041:004) has been damaged recently by agricultural traffic.**

Considering only the sites that are in the top (best) three survival categories, the percentages of sites with recent damage is very similar: 50% at statutorily protected sites, and 47% at sites not statutorily protected. A slightly greater number of instances of damage were recorded at sites not statutorily protected (an average of 1.5 instances per site) than at statutorily protected sites (an average of 1.4 instances per site). As Scheduled Monuments are largely on private land and are not normally excluded from grazing, as this is regarded as the best way to prevent scrub encroachment, this can account for some of the damage reflected within these statistics.

The data recorded in the CAMSAR survey indicate that continued pro-active management of these sites is very necessary (Plate 13). Table 30 gives an overview of the total number of sites which are statutorily protected but which have been recently damaged. Effects of livestock, scrub encroachment and rabbit burrowing are the most common problems at scheduled sites and those in agri-environment schemes (Table 31).

**Table 31 The 213 kinds of damage identified at scheduled and agri-environment managed sites in the CAMSAR sample.**

| Recent damage type    | Instances | Recent damage type           | Instances |
|-----------------------|-----------|------------------------------|-----------|
| Livestock             | 73        | Tree planting                | 5         |
| Scrub encroachment    | 36        | Agricultural traffic         | 5         |
| Rabbit burrowing      | 25        | Wind, weather, time          | 3         |
| Overgrown             | 25        | Reseeding                    | 3         |
| Badgers               | 9         | Archaeological excavation    | 2         |
| Dumping               | 7         | Mineral extraction/quarrying | 1         |
| Unstable/fallen trees | 6         | Drainage                     | 1         |
| Cultivation           | 5         | Supplementary feeding sites  | 1         |
| Visitors              | 5         | Water troughs                | 1         |
| Drainage              | 14        | Rabbit burrowing             | 2         |

#### 6.10.4 Recent damage and types of land use

Table 32 records the percentage of sites in each category of land use which have been damaged in recent years. Some monuments have survived better in association with a particular form of land use than others. Table 32 highlights the fact that higher percentages of sites on the 'woodland' (58%) and 'unimproved grassland' (36%) categories than might be expected but those sites with better rates of survival, and therefore more upstanding remains, are more likely to show both recent and past damage.

'Improved grassland' has a low proportion of sites (14%) with damage in the past five years. Hopefully this reflects the downturn in land improvement in response to the current DARD policies of caring for the environment.

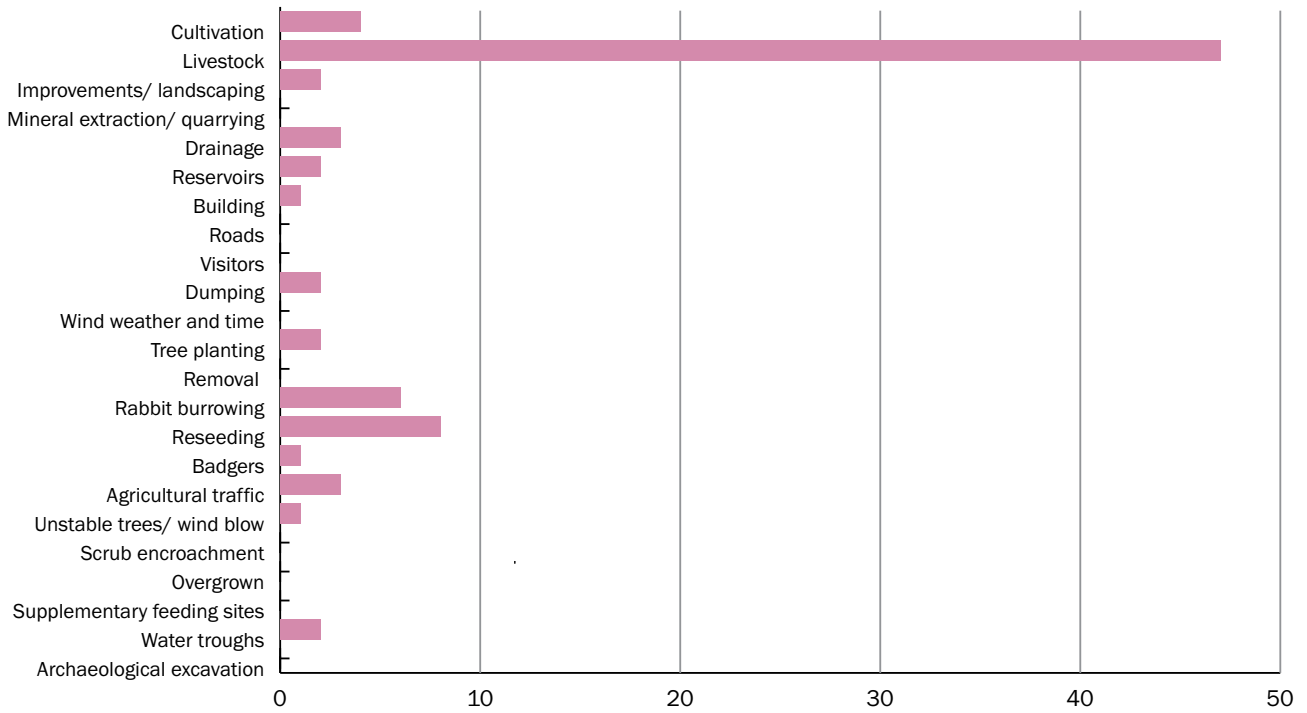
High percentages of sites on land in the 'improved grassland and woodland' (64%) and 'unimproved grassland and woodland' (75%) categories have however been damaged in recent years, and it is evident that where there are multiple land uses at a site the archaeological remains are at greater risk. These are sites on the more marginal areas away from intensive production and which continue to suffer from animal trampling and scrub invasion.

**Table 32 Percentage of sites in each land use category which have been damaged in the past five years (only categories with 20 or more individual sites are shown).**

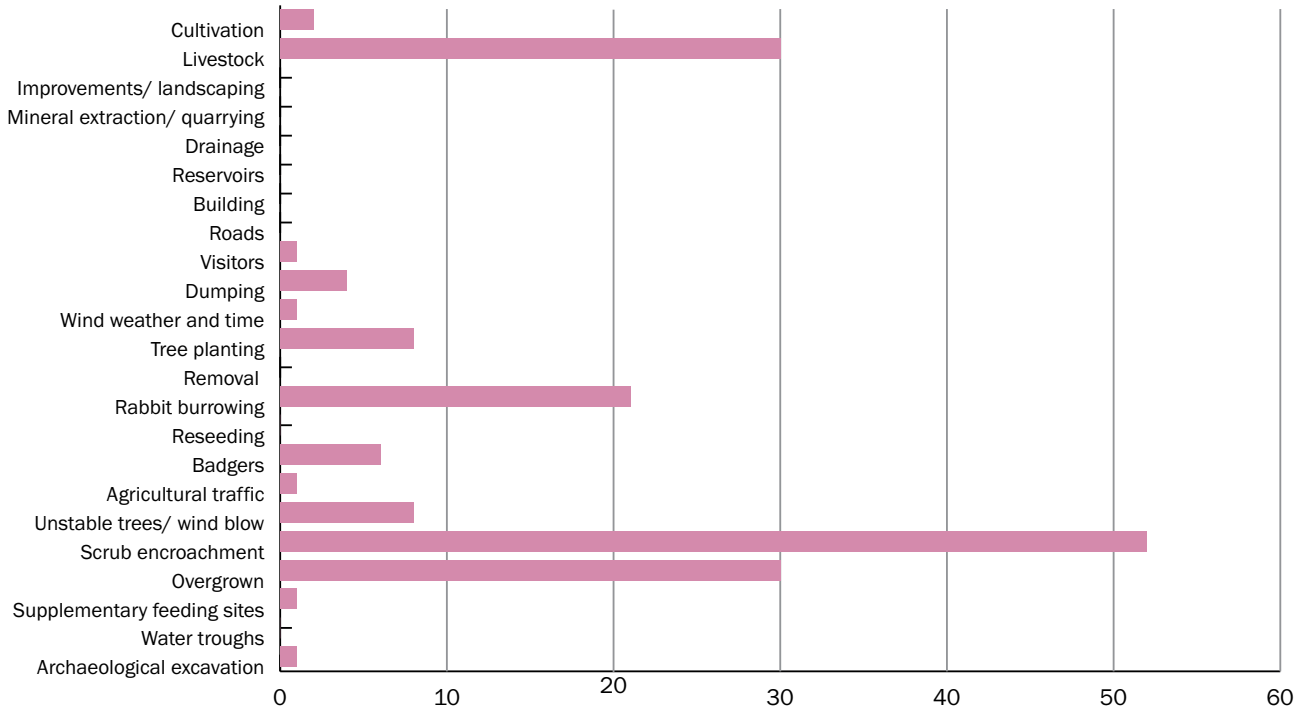
| Land use category              | % of sites in each category which have been damaged in recent years |
|--------------------------------|---|
| Improved grassland             | 14  |
| Unimproved grassland           | 36  |
| Arable                         | 40  |
| Wetland                        | 16  |
| Development                    | 11  |
| Boundaries                     | 19  |
| Woodland                       | 58  |
| Improved grassland, boundaries | 46  |
| Improved grassland, woodland   | 64  |
| Unimproved grassland, woodland | 75  |

The use of land around a monument will inevitably influence the nature of damage that can occur. Figure 13 illustrates differences between monuments on improved grassland and in woodland. A total 55.95% of damage events to sites on improved grassland have been caused by the actions of livestock. While livestock also pose a problem within woodland areas (18.07% of the total instances), the greatest issue in this land use category is scrub encroachment and overgrowth, which when combined, have caused 49.40% of instances of damage to sites in woodland.

**Figure 13 Comparison of types of damage which have affected sites a) in ‘improved grassland’ and b) in ‘woodland’ (see also Appendix 7).**



a) Number of damaged sites on improved grassland and causes within the past five years



a) Number of damaged sites in woodland and causes within the past five years

### 6.10.5 Recent damage and structural type

The results from the survey show that the proportion of each structural category damaged within the past five years varies quite considerably. Table 33 shows that 32% of earthworks and 30% of orthostatic monuments had suffered compared with 16% of the 'burial/burial mound' category and 11% of masonry structures. This reflects the way in which monuments occur on farmland, with earthworks and megalithic tombs being more likely to occur on grazing and arable land.

**Table 33 Percentages of each structural category which have been damaged within the past five years (only categories with more than 20 individual sites are shown).**

| Structural category          | % of total number of sites in each category damaged recently |
|------------------------------|--|
| Orthostatic                  | 30   |
| Piled stone                  | 19   |
| Earthworks                   | 32   |
| Freshwater                   | 10   |
| Masonry                      | 11   |
| Carved stone                 | 19   |
| Miscellaneous                | 8  |
| Burial/burial mound          | 16   |
| Masonry, burial/burial mound | 20   |

Table 34 illustrates the types of damage which have affected the four most numerous structural categories, 'orthostatic', 'piled stone', 'earthworks' and 'masonry monuments', as a percentage of the total number of damaging events in each of those structural groups. Orthostatic monuments suffer most often from livestock damage (58%). Piled stone structures are damaged most often by scrub encroachment and overgrowth, affecting 47% of this class of monument, although piled stone structures are also affected by a range of other factors, including mineral extraction and quarrying (5%), dumping (5%) and livestock damage (21%).

Damage caused by livestock was most frequently noted at earthworks (33%) as they support grazing, and they also suffer from rabbit burrowing (15%). Scrub encroachment, combined with overgrowth, accounted for 39% of the damage recorded at masonry monuments. In addition, almost 17% of the cases of damage encountered at masonry monuments were caused by livestock using them as shelter.

**Table 34 Types of damage which have affected sites in each structural category of the**

| Damage type                                | Orthostatic Monuments (% affected) | Piled Stone Structures (% affected) | Eartworks (% affected) | Masonry Structures (% affected) |
|--|------------------------------------|-------------------------------------|------------------------|---------------------------------|
| Cultivation                                | 6                                  | 0.0                                 | 7.2                    | 0.0                             |
| Livestock                                  | 58                                 | 21.1                                | 32.9                   | 16.7                            |
| Improvements/ landscaping                  | 0                                  | 0.0                                 | 1.2                    | 0.0                             |
| Mineral extraction/ quarrying              | 0                                  | 5.3                                 | 0.7                    | 5.6                             |
| Drainage                                   | 0                                  | 0.0                                 | 0.7                    | 0.0                             |
| Reservoirs                                 | 0                                  | 0.0                                 | 0.2                    | 5.6                             |
| Building                                   | 0                                  | 0.0                                 | 0.7                    | 5.6                             |
| Roads                                      | 0                                  | 0.0                                 | 0.2                    | 0.0                             |
| Visitors                                   | 0                                  | 0.0                                 | 1.2                    | 0.0                             |
| Dumping                                    | 2                                  | 5.3                                 | 2.8                    | 0.0                             |
| Wind weather and time                      | 0                                  | 5.3                                 | 0.2                    | 5.6                             |
| Tree planting                              | 4                                  | 0.0                                 | 2.8                    | 5.6                             |
| Removal                                    | 0                                  | 0.0                                 | 0.2                    | 0.0                             |
| Burrowing animals                          | 2                                  | 0.0                                 | 18.5                   | 11.2                            |
| Reseeding                                  | 0                                  | 0.0                                 | 2.1                    | 0.0                             |
| Agricultural traffic                       | 0                                  | 5.3                                 | 2.3                    | 0.0                             |
| Unstable trees/wind blow                   | 2                                  | 5.3                                 | 3.2                    | 0.0                             |
| Scrub encroachment/overgrown               | 26                                 | 47.4                                | 21.0                   | 38.9                            |
| Supplementary feeding sites/ water troughs | 0                                  | 0.0                                 | 1.4                    | 0.0                             |

**References**

45 DARD 2006, 31

46 *ibid.*

47 Lee 1995, 98

48 A manual count of sites as represented on OS six-inch maps from the 1830s to the 1960s.

49 Figure correct in 2004: numbers of statutorily protected historic monuments increase annually, and in 2008 the number of statutorily protected historic monuments increased to over 1800.

50 Gerrard 2002, 58

51 Rimmington 2004, 4



7

**COMPARISON WITH  
OTHER SURVEYS  
IN BRITAIN AND  
IRELAND**







## 7 COMPARISON WITH OTHER SURVEYS IN BRITAIN AND IRELAND

Direct comparison between CAMSAR and other surveys of the archaeological resource in Britain or Ireland is difficult. Each of the previous studies was conducted according to different methodologies at different times, and it is not possible to achieve at this time a common vocabulary between all of them. Some comparisons to broad trends can, however, now be made.

The CAMSAR 'survival' category is very similar to the 'monument state' category used in the Monuments at Risk Survey (*MARS*) conducted in England<sup>52</sup>. It was found that 64% of *MARS* earthworks had been flattened, largely in agricultural improvement, leaving only 36% with any upstanding remains. The corresponding data from the CAMSAR survey tells us that 56% of earthwork monuments were found to have at least some upstanding remains, regardless of whether their condition was recorded as excellent or poor within the survey. Essentially, this means that earthworks in Northern Ireland have survived substantially better than in England, reflecting the fact that the intensive farming practices in England, especially arable production, have taken their toll, while Northern Ireland is a largely pastoral country. *MARS* also found that the state of buildings and structures was better than earthworks, with almost 70% found upstanding<sup>53</sup>. The high percentage of upstanding remains in the *MARS* 'buildings and structures' category may be related to the inclusion of eighteenth, nineteenth and twentieth century buildings and structures within the remit of the English survey. Buildings of and early modern date were not included in the CAMSAR survey.

The use of the land on which a monument was sited was found to have had a significant effect on the survival of monuments in each of the surveys. *MARS* found that loss of earthworks occurred at a higher rate in landscapes that were developed (roads, airports) or subject to extractive industries (mineral quarries), while higher rates of upstanding remains survived on rough pasture, coniferous woodland and broadleaved woodland. Similar results were observed for the building and structures category within the *MARS* project<sup>54</sup>. As with the *MARS* survey, the CAMSAR data revealed poorer rates of survival on developed land, and found that sites were more likely to survive well on unimproved grassland and woodland. The Archaeological Features at Risk Survey (*AFAR*), undertaken in the Republic of Ireland, also noted that land use had an effect on monument condition and survival and found that pastoral farming was a clear threat to monuments in its study areas<sup>55</sup>.

In the CAMSAR study almost 59% of all monuments visited had been damaged at some time in the past with almost 27% having suffered damage within the past five years, compared to the 95% of *MARS* monuments which were found to have been damaged<sup>56</sup>. When only monuments that fell into the top three 'survival' categories in the CAMSAR sample are considered, it was found that 48% had been damaged within the previous five years. *AFAR* found that 17% of monuments visited had been already altered since the compilation of the County Archaeological Inventories<sup>57</sup>, and land improvements are listed as the greatest cause of this change affecting 55% of those damaged, with 10% affected by development<sup>58</sup>.

Even though direct comparison with the MARS and AFAR projects is not possible, the CAMSAR study has identified similar trends and concerns, and all three studies have highlighted the pressures on archaeological sites and monuments. Large elements of the archaeological resource in England and Ireland have already been lost, and 23% of monuments in Northern Ireland have no recognisable surface remains. Continual piecemeal damage to the remainder is also an issue highlighted by all three surveys, with agricultural land-management practices cited by all as its main cause.

A future re-survey of the same random selection of CAMSAR sites would provide a much clearer picture of how the archaeological resource is changing in Northern Ireland and whether CAP reforms have had a positive effect. One of the key recommendations of this report is that a similar survey should be conducted in 2014, ten years after this initial survey. This will depend on the partnerships and resources available at the time but a future project could involve further refinement of the survey methodology to isolate key management issues of the time. A new survey could also capture public attitudes to the archaeological resource. As most sites are in private ownership but are considered to be a common cultural resource, public opinion plays an important part in the creation of conservation policies for the future.

**References**

- 52 Darvill and Fulton 1998, 239  
53 *ibid.* 239  
53 *ibid.* 2395  
54 *ibid.* 188  
55 O'Sullivan et al. 2001, 35  
56 O'Darvill and Fulton 1998, 143  
57 O'Sullivan 2001, 33  
58 *ibid.* 34

8



**DISCUSSION**







## 8 DISCUSSION

Throughout the survey it was apparent that earthwork monuments and megalithic tombs are under particular pressures from agricultural practices, development and natural processes. It has long been recognised in the UK and Ireland that earthworks are more vulnerable to destructive forces than masonry structures<sup>59</sup>. Although this vulnerability has been recognised, financial resources tend to be directed towards the conservation and protection of masonry monuments, while conservation and management of earthwork monuments has received less attention<sup>60</sup>. Conservation practices in Britain regarding earthworks are generally reactive rather than pro-active and it is recognised there that management strategies for earthworks need to follow the lead of that for masonry sites<sup>61</sup>.

Earthworks represent over 60% of the archaeological sites and monuments in Northern Ireland. It was recognised in the CAMSAR study that, for all of the archaeological resource, there was no single threat that would result in wholesale destruction. Rather, it is exposure to a range of factors, both human and natural, that contributes to continued deterioration and loss of historic fabric at archaeological sites and monuments. Almost half of these factors are related to agriculture. In the vast majority of cases this is not necessarily intentional damage by farmers or others involved in agriculture. In some cases landowners genuinely do not know that they have important sites or monuments on their land, while in other cases the importance of the remains is not always appreciated nor do they understand how best to manage them. Further, the way in which agriculture is changing, especially with increased mechanisation and a reduced number of people actively working the land, has resulted in the loss of skills and knowledge about the care of such sites. The reduction in superstitious beliefs has also played a part.

As such, a combination of factors is causing the gradual erosion of the physical fabric and integrity of individual sites and monuments. There are sites which become threatened by devastating factors such as the construction of new buildings or laneways, but CAMSAR has highlighted that the more urgent threat is posed by piecemeal loss at individual monuments. This has severe consequences for the long-term survival of a monument if projected 20 to 50 years into the future. Unfortunately, such piecemeal destruction rarely inspires positive action to prevent it, and erosion is allowed to continue unchecked unless NIEA or DARD inspectors discover it and provide advice and support to address it.

Marked differences were noted in the survival of sites within each of the different categories of land use. This clearly indicates that there are inherent risks to the archaeological resource associated with particular land use practices across a range of landscapes within urban, rural and peri-urban areas. Land uses which have the lowest site survival rates are arable, improved grass and development. Monuments that have survived on these land use types tend to be more poorly preserved and are in increasingly vulnerable condition. Around 50% of the monuments on these three land use types have already been destroyed or are barely visible (ranging from 48.5% to 51.6%).

Sites located in 'wetlands' including peatland, 'unimproved grassland', and 'woodland', as well as those set in boundaries, have survived substantially

better with only between 12.5% and 20.5% which are already destroyed or barely visible. Indeed, monuments on land used as 'improved grassland', 'arable' and 'development' were found to have more than twice the likelihood of having their above-ground remains levelled than sites in the 'wetland', 'unimproved grassland', 'woodland' and 'boundary' categories. Sites within the 'woodland' and 'boundary' categories survive particularly well, although sites in the 'woodland' class have also witnessed the greatest levels of damage within recent years.

In general, monuments in old or mixed woodlands have survived relatively unscathed over the centuries and are in good condition above ground. Root action and the damage caused by old trees that have been blown down have been identified as causes of recent damage. Increased effort is needed by woodland managers, whether private owners or Forest Service staff and contractors to preserve and protect sites in woodland to prevent any further erosion.

In general, the CAMSAR survey found that best practice guidelines were followed by Forest Service when planning works near archaeological sites located within their estate. A common practice is the use of a 20m exclusion-zone around archaeological sites, leaving an area at and around a monument free from new planting. While this practice helps avoid damage to monuments, such sites do not usually receive focused management or regular NIEA inspections unless they are scheduled. As a result, some sites can lose their relationship to the surrounding landscape, and in time may become clearings in dense forest, a setting which may be quite different to the one utilised by the original builders of the monument. This is particularly the case for megaliths, where views to surrounding landforms and points on the horizon may have been significant features in the positioning of the monuments. As long as the site or monument is guarded from ploughing, planting and damage in clear-felling it is the best that can be done in most cases. However, an added problem is the increase in scrub vegetation that can generate at these sites causing potential root damage and also presenting difficulties for inspection. In a small number of cases sites had been accidentally damaged as a result of forestry operations. This was probably the result of contractors not knowing about the presence or significance of monuments on the lands where they were working. This should prompt a better system of providing advice about monuments to contractors engaged in clear-felling.

Recommendations made as a result of The North York Moors Forest Survey Project included a requirement for all archaeological features to be located and clearly marked prior to any forestry works to prevent accidental damage<sup>62</sup>. There are difficulties in providing appropriate methods of marking archaeological features, but the Forest Survey Project recommended the use of temporary wooden posts and fluorescent tape to cordon off sites during operations. The report recommended also that the use of more permanent markers, instantly recognisable to all forestry workers, should be considered, suggesting low marker posts around the periphery of a site, which would also provide a barrier to vehicles<sup>63</sup>. A high percentage of sites in woodland in Northern Ireland are still upstanding, and it is important to maintain the already good partnership with Forest Service to manage them in an optimum way.

In the future, climate change is likely to result in changing land use practices in Northern Ireland. This will in turn affect the ways in which agricultural activities might impact on our archaeological sites and monuments. Changes to weather patterns may also directly impact on the monuments themselves. In general terms, it has been suggested that Northern Ireland will become warmer, with increased rainfall<sup>64</sup>. This projected change in rainfall, with reduced opportunity for the ground to dry out, may present increased risk to the structural stability of sites and the impacts of vegetation, livestock or machinery on them. Trampling of soil by cattle may be one of the most visible outcomes, but there are other potential effects to be considered. Greater saturation of the ground may result in increased instability of earthwork monuments<sup>65</sup>. Greater penetration by water may further erode the mortar of masonry monuments, especially at the wall tops. Wetter masonry monuments could also be more prone to frost damage, with more rapid and damaging impacts of wetting and freezing during cold snaps/frosty weather<sup>66</sup>. Wetter summers lead to growth spurts of vegetation on walls leading to ivy and tree growth which threaten stability. Increasing sea levels and increasing levels of flooding inland will also impact upon archaeological sites and monuments located on Northern Ireland's coastline or floodplains<sup>67</sup>. In addition, events of flooding expanding outside of traditional areas of flood plains may also adversely affect archaeological sites and monuments.

Changes to agricultural practices as a result of anticipated climate change are more difficult to anticipate. Much will depend on the continuation and strengthening of existing policies on care for the environment as prescribed in the current Good Farming Practice guidelines. Looking to the future, generally warmer conditions may favour cereal production, but increased rainfall, especially with wetter summers, would favour continued mixed farming with an emphasis on livestock. It has been suggested that there would be an increase in crop production, especially in the eastern part of Northern Ireland<sup>68</sup>. An increase in arable farming has the potential to adversely affect more sites and monuments unless landowners are helped to recognise the importance of the archaeological resource which is protected in DARD policy and agri-environment legislation.

Future patterns of land use, and its impact on the archaeological resource will need to be reviewed from time to time, and it is important that there is appropriate and adequate outreach to the agricultural community to help protect and manage archaeological sites. NIEA: Built Heritage has developed a strong partnership with DARD since 1978, inputting to policy, practice and training and it is to be hoped that this relationship will continue to safeguard the historic environment against inappropriate practices and development.

The CAMSAR survey has shown that it is not necessarily major infrastructural development that poses the greatest risk to archaeological sites and monuments in Northern Ireland. The study has shown, rather, that the long-term survival of this resource is threatened by constant exposure to a range of factors, which together are causing continued erosion and destruction. There are, of course, sites which will become partially or wholly threatened (if not destroyed) by major developments, but this process is mitigated through a combination of planning policies that deal with new development proposals, and new land zonings established through new strategic development plans.

Gradual or piecemeal damage goes largely unchecked despite severe consequences for the survival of individual monuments, but it occurs at such a low level that it rarely triggers preventive and/or remedial action, so that piecemeal erosion continues unchecked, especially at earthworks. An example where positive pro-active action was taken in relation to an earthwork in Northern Ireland is McQuillan's work at Derryneill, a scheduled rath (DOW 035:019)<sup>69</sup>. In this instance 'brashing' was used to help reduce damage that had been caused by livestock and soil erosion. This technique involved the construction of a barrier of tree trimmings and this thicket was placed around the base of the eroded mound instead of the more traditional timber or wire fence<sup>70</sup>. This method of keeping animals away from an already eroded surface has many advantages over the erection of fencing. It is cost effective (with the material used having been cleared from the monument itself), it does not adversely impact on the appearance of the monument, and it is a sustainable, environmentally friendly technique<sup>71</sup>. As it does not involve the driving of posts (as with more traditional methods such as barbed-wire fencing) the 'brashing' barrier has no archaeological impact and is also more readily reversible<sup>72</sup>.

This kind of solution should be considered for other earthwork sites, particularly when problems of damage by livestock and soil erosion are first identified. In order to achieve this, however, extra resources would need to be focused on monitoring these particular kinds of problems, and projects of this type often require significant time and effort from the landowner, NIEA inspectors and field monument wardens. The case at Derryneill demonstrated in a Northern Ireland context how effective this kind of conservation work can be, and further action of this type should be facilitated if the gradual decline of earthworks and other monument types is to be halted.

In the Republic of Ireland, a pilot project run by the Heritage Council and Sligo and Clare County Councils has tested a pro-active approach to the preservation of archaeological sites and monuments<sup>73</sup>. This scheme is similar in some respects to the use of field monument wardens in Northern Ireland, with a field monument advisor systematically visiting monuments on farmland and meeting landowners, with the aim of supporting them in the protection and conservation of monuments in their care<sup>74</sup>. An important element of this scheme was to inform landowners of the presence of sites and monuments on their land, and to provide best-practice advice about the management of these features<sup>75</sup>. The pilot scheme proved the effectiveness of protecting archaeological sites through improved awareness and undertaking proactive measures with landowners to help protect the archaeological resource.

**References**

- 59 Darvill and Fulton 1998, 239; O'Sullivan *et al.* 2001, 67  
60 Brown 1994, XI; Rimmington 2004, 1  
61 Rimmington 2004, 1  
62 Lee 1995, 101  
63 *ibid.* 103  
64 Smyth *et al.* 2002, v  
65 McAdam and Anderson 2002, 63  
66 Stephens 2002, 75  
67 *ibid.*  
68 McAdam and Anderson 2002, 61  
69 McQuillan 2004  
70 McQuillan 2004, 138-9  
71 *ibid.* 140  
72 *ibid.* 140  
73 Lynch and Doyle 2005, 14  
74 *ibid.*

# 9

## RECOMMENDATIONS









## 9 RECOMMENDATIONS

The CAMSAR survey is a statistical analysis of the archaeological field monument resource earlier than AD 1700 in Northern Ireland. As the study was based on reliable data gathered in the field, eight key recommendations can now confidently be made to enhance the protection and the effective management of this resource for the future. These recommendations are listed below:

### **1) Enhance the Northern Ireland Sites and Monuments Record**

The Northern Ireland Sites and Monuments Record (NISMR) was recognised as an essential resource for undertaking the CAMSAR project. Indeed, it is a vital resource in the management of Northern Ireland's archaeological sites and monuments providing accurate information on individual sites and monuments for a variety of public and research uses. Given its central role in the management of archaeology in Northern Ireland and its contribution to environmental education and outreach, resources should be targeted on its enhancement and on-going maintenance.

### **2) Promote awareness and continue to develop good relations with the owners of historic sites and monuments**

Throughout the CAMSAR project, it became clear that many landowners and farmers were interested in the archaeological sites and monuments located on their land. By raising awareness about the presence of archaeological sites and monuments, and by highlighting the vulnerability of this finite resource, many unintentional episodes of damage could be avoided in the future. Not only do the people who are involved in day-to-day management of these sites need this information, but they also need help and guidance to take good decisions that will conserve sites and prevent inadvertent damage. This may require additional resources for NIEA to provide more agri-environment advice.

Literature has been routinely developed since the 1980s providing advice and guidance to landowners. This should continue to be widely distributed and resources would be well-spent on increasing this outreach through training for both DARD inspectors and landowners.

### **3) Plan for focused research into the archaeological resource in Northern Ireland**

A substantial number of sites in the sample have no above-ground remains. Most of these are sites that have been identified on aerial photographs or which were marked on early maps. As these sites do not present above-ground remains, it is difficult to assess exactly what they were or how well preserved they are below the ground surface. It follows that we do not know what damage is being caused to them through ploughing. A research programme should be established to evaluate the evidence from aerial photographs to provide a better understanding of this part of the archaeological resource. We need to be able to positively identify what types of sites these were, how old they are, what survives below the ground surface, and how they can be successfully maintained as a resource for the future.

**5) Improve the condition of the sites which are identified as in poorest condition, in the most vulnerable locations, and those found in the most damaging land use categories**

Resources should be focused in the first instance on those sites identified in the CAMSAR study as being in the poorest condition due to their vulnerable locations and the land use being practised on and around them. Scheduling protection should be considered for these sites, as appropriate, and liaison with DARD and landowners should be further developed to secure optimum management practices. Arable, improved grassland, and development classes of land use have seen the greatest loss of archaeological sites and monuments.

**6) Develop management strategies for sites and monuments located within woodland**

Sites located within woodland in Northern Ireland have survived well, with only 9% of sites in this land use category having been removed in the past. The conservation of this well-preserved group of monuments should be further developed, particularly in partnership with landowners and Forest Service (in DARD) to ensure that best-practice continues to be observed and to present more sites in Forest Service care for the enjoyment of the visiting public.

**7) Augment the schedule of historic monuments in Northern Ireland**

It was recognised in the CAMSAR survey that statutorily protected archaeological sites and monuments are generally in better condition, have substantial surviving remains, and are frequently visible as public heritage assets in Northern Ireland. It is important that present statutory protection arrangements through the scheduling programme are maintained. The very important interface provided by field monument wardens in providing practical, hands-on advice to owners of monuments should continue and increase as resources allow. The establishment of more management agreements, where necessary, to address erosion and collapse issues would continue to provide a very cost-effective support to the vulnerable archaeological resource.

**8) Conduct a further Condition and Management Survey of the Archaeological Resource (CAMSAR) in 2014**

The present CAMSAR survey has provided a statistical snapshot of the state of the archaeological resource in 2004-5; future surveys are required to identify trends in the condition and management of this resource. It is recommended that a similar survey of the same sites is conducted in 2014, reporting in 2016, to check whether current policies and practices across the environment in Northern Ireland are delivering improved conditions for archaeological sites.

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## **APPENDICES**







**APPENDIX 1: LIST OF 1500 SITES VISITED**

| SMR         | Grid Ref  | Townland                                    | Edited Type   |
|-------------|-----------|---|---|
| ANT 001:010 | D12755194 | Knockans                                    | Sweat house   |
| ANT 001:011 | D14085207 | Ballynagard                                 | Possible prehistoric settlement site                  |
| ANT 001:015 | D14985073 | Demesne                                     | Bronze Age cist burial                                |
| ANT 001:037 | D12675166 | Knockans                                    | Aerial photo site: hut site                           |
| ANT 002:007 | C884406   | Ballymacrea Lower                           | Occupation site                                       |
| ANT 002:011 | C91184084 | Dunluce                                     | Aerial photo site: field boundary?                    |
| ANT 003:038 | C96484516 | Tonduff Mountain                            | Aerial photo site: possible enclosure                 |
| ANT 003:043 | C97284524 | Carrowreagh Mountain                        | Aerial photo site: possible hut site                  |
| ANT 003:050 | C94524091 | Clogher Anderson                            | Aerial photo site: enclosure<br>(possibly tree ring)  |
| ANT 003:061 | C97484303 | Lisnagunogue Lower                          | Souterrain  |
| ANT 003:069 | C96364547 | Tonduff Mountain                            | Aerial photo site: enclosures or hut sites?           |
| ANT 004:020 | D10774155 | Clare, Ballycastle                          | Enclosure   |
| ANT 004:022 | D10014291 | Carnduff                                    | Castle/promontory fort: Duinnagregor                  |
| ANT 004:033 | D02614316 | Clegnagh                                    | Aerial photo site: possible barrow                    |
| ANT 004:038 | D05094365 | Ballintoy                                   | Aerial photo site: possible enclosure                 |
| ANT 004:055 | D04214316 | Lagavara                                    | Aerial photo site: possible barrow or hut site        |
| ANT 004:059 | D07574152 | Craigan Lee                                 | Aerial photo site: possible hut site                  |
| ANT 004:095 | D03324513 | Ballintoy Demesne                           | Natural basalt stack/door: Dunnaglea                  |
| ANT 004:096 | D03204508 | Ballintoy Demesne                           | Habitation site: Dunshammer                           |
| ANT 005:002 | D14714132 | Tornabodagh                                 | Souterrain (O.S. Mem Site)                            |
| ANT 005:007 | D17244263 | Cross                                       | Fortified outcrop, possible motte and<br>bailey: door |
| ANT 005:008 | D17174228 | Cross                                       | Church and graveyard: Killyyenan                      |
| ANT 005:029 | D167417   | Ballyreagh Upper                            | Enclosure   |
| ANT 005:034 | D19084180 | Bighouse                                    | Neolithic settlement site                             |
| ANT 006:002 | C91303693 | Revallagh North                             | Fortified outcrop: Revallagh Fort                     |
| ANT 006:005 | C88833830 | Knockertotan                                | Enclosure   |
| ANT 006:056 | C90794033 | Leeke                                       | Standing stone  |
| ANT 007:002 | C94674077 | Clogher Anderson,<br>Bushmills              | Oval mound: possible barrow                           |
| ANT 007:010 | C98453706 | Carnmoon                                    | Crannog?  |
| ANT 007:014 | C99323484 | Deffrick                                    | Stone platform and souterrains                        |
| ANT 007:017 | C94353627 | Ballynarry Lower                            | Enclosure and souterrain                              |
| ANT 007:020 | C93424071 | Ballaghmore Or Bushmills                    | Souterrain  |
| ANT 007:023 | C96453907 | Craig                                       | Wooden house built over souterrain                    |
| ANT 007:059 | C94704072 | Clogher North/South/<br>Anderson, Bushmills | Standing stone  |
| ANT 007:087 | C940406   | Bushmills Or Magheraboy,<br>Glebe           | Medieval settlement: Bushmills                        |
| ANT 007:143 | D00983578 | Moycraig Hamilton                           | Souterrain  |
| ANT 008:011 | D08453820 | Turraloskin                                 | Holy well: Kille Well                                 |
| ANT 008:017 | D03233754 | Curramoney                                  | Cairn (destroyed): Carnanmore                         |
| ANT 008:036 | D02184008 | Prolusk                                     | Aerial photo site: barrow?                            |
| ANT 008:040 | D07453942 | Coolkenney                                  | Aerial photo site: cropmark                           |
| ANT 008:044 | D08743986 | Carneatly                                   | Aerial photo site: enclosure                          |
| ANT 008:061 | D02593752 | Carnlelis                                   | Aerial photo site: cropmark                           |
| ANT 008:082 | D06903616 | Magheramore                                 | Cropmark  |
| ANT 008:084 | D04053614 | Carrowreagh                                 | Cropmarks   |
| ANT 008:085 | D02963623 | Carrowreagh                                 | Cropmark  |
| ANT 008:090 | D09183628 | Magheramore                                 | Cropmark  |

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| ANT 008:105 | D09633484 | Gortmillish                            | Cropmark  |
| ANT 008:107 | D09203497 | Gortmillish                            | Cropmark  |
| ANT 008:111 | D11524044 | Town Parks, Ballycastle – 18th century | Stone-lined well                                      |
| ANT 008:126 | D05704068 | Broughgammon                           | Souterrain  |
| ANT 008:134 | D11543946 | Kilcreg                                | Cropmark  |
| ANT 009:009 | D14774076 | Barnish                                | Standing stone  |
| ANT 009:010 | D16064131 | Ballyreagh Lower, Ballyvoy             | Cashel  |
| ANT 009:021 | D19983675 | Ballyvenaght                           | Double portal tomb                                    |
| ANT 009:025 | D18323698 | Ballypatrick                           | Round cairn   |
| ANT 009:026 | D15723770 | Glenmakeeran                           | Round cairn   |
| ANT 009:034 | D13253876 | Drumeeny                               | Church, graveyard, cross-carved stones and souterrain |
| ANT 009:041 | D16493987 | Drumnakeel                             | Souterrain  |
| ANT 009:045 | D13363872 | Drumeeny                               | Church, graveyard, font and cross-carved stone        |
| ANT 009:049 | D20563615 | Ballyvenaght                           | Round cairn   |
| ANT 009:073 | D12183979 | Drumavoley                             | Aerial photo site: field banks                        |
| ANT 009:075 | D13474088 | Broughanlea                            | Aerial photo site: cropmark                           |
| ANT 009:076 | D17454121 | Dunmakelter                            | Two mounds  |
| ANT 009:088 | D18133898 | Ballyvenaght                           | Aerial photo site: cropmark                           |
| ANT 009:106 | D18774064 | Bighouse                               | Souterrain  |
| ANT 009:115 | D12154071 | Town Parks Ballycastle                 | Aerial photo site: seven cropmarks                    |
| ANT 009:145 | D142355   | Duncarbit                              | Enclosure and souterrains                             |
| ANT 009:153 | D14984083 | Barnish                                | Possible barrow with cist                             |
| ANT 009:173 | D15424067 | Barnish – SMR destroyed                | Mass site   |
| ANT 009:174 | D13983495 | Greenan                                | Mound with multiple cist burials                      |
| ANT 009:179 | D21324060 | West Torr                              | Settlement: booley houses and field boundaries        |
| ANT 009:203 | D15293668 | Craigban                               | Megalithic tomb                                       |
| ANT 010:024 | D228401   | East Torr                              | Souterrain  |
| ANT 012:002 | C94403341 | Benvardin, Carncoggy                   | Tree rings  |
| ANT 012:014 | C93022874 | Fort Town                              | Mound: rath? Or motte?                                |
| ANT 012:025 | C97103132 | Stroan Upper                           | Aerial photo site: circular cropmark                  |
| ANT 012:040 | C96213439 | Islandahoe                             | Megalith  |
| ANT 013:003 | D02243208 | Carnfeogue                             | Standing stone  |
| ANT 013:027 | D06063115 | Moyaver Upper                          | Megalithic tomb                                       |
| ANT 013:028 | D05823157 | Moyaver Upper                          | Enclosure   |
| ANT 013:037 | D02573084 | Livery Upper                           | Urn burials   |
| ANT 013:041 | D03353462 | Carnkirk                               | Aerial photo site: circular cropmark                  |
| ANT 013:045 | D03293368 | Gracehill                              | Aerial photo site: sub-rectangular cropmark           |
| ANT 013:050 | D09673417 | Tullaghore                             | Aerial photo site: settlement site                    |
| ANT 013:066 | D10273365 | Tureagh                                | Aerial photo site: circular cropmark                  |
| ANT 013:068 | D07593310 | Turnarobert                            | Aerial photo site: D-shaped enclosure?                |
| ANT 013:108 | D09533393 | Tullaghore                             | Holy well   |
| ANT 014:006 | D13363475 | Corvally                               | Standing stone  |
| ANT 014:026 | D19023229 | Clyttaghan                             | Aerial photo site                                     |
| ANT 014:029 | D12592951 | Shelton North                          | Aerial photo site: mound?                             |
| ANT 015:003 | D23462926 | Coshkib                                | Earthwork: one of pair (with 015:002)                 |
| ANT 015:024 | D25673497 | Corrymellagh                           | Stone circle? Or cashel?                              |
| ANT 015:047 | D24432934 | Layd                                   | Castle  |
| ANT 015:062 | D23813111 | Drumnasmear                            | Bullaun   |
| ANT 015:064 | D25713470 | Corrymellagh                           | Stone enclosure                                       |
| ANT 015:074 | D23503163 | Drumnasmear                            | Souterrain  |

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| ANT 015:082 | D23633132 | Drumnasmeear                                     | Possible souterrain                              |
| ANT 017:010 | C99622747 | Topp Lower                                       | Enclosure  |
| ANT 017:011 | D00482650 | Dungorbery                                       | Enclosure and souterrain                         |
| ANT 017:012 | D00902638 | Lisboy   | Enclosure and souterrain                         |
| ANT 017:013 | D01642583 | Kilraghts  | Church and graveyard                             |
| ANT 017:014 | D01112562 | Lisboy   | Standing stone                                   |
| ANT 017:015 | D01722479 | Kilraghts  | Mound and souterrain                             |
| ANT 017:031 | C92482513 | Coldagh  | Enclosure  |
| ANT 017:034 | D01612712 | Drumaqueran                                      | Cross-carved stone                               |
| ANT 017:055 | D00092648 | Killyramer / Dungorberry                         | Graveyard  |
| ANT 018:016 | D08052266 | Corkey Middle                                    | Standing stone?                                  |
| ANT 018:018 | D06372199 | Ballyweeny                                       | Raised rath and souterrain                       |
| ANT 018:019 | D04902305 | Knockaholet                                      | Rath? Motte and bailey and two urn burials       |
| ANT 018:027 | D05002225 | Knockaholet                                      | Souterrain                                       |
| ANT 018:044 | D054233   | Ballyportery North,<br>Lavin Upper               | Neolithic occupation site                        |
| ANT 018:046 | D08522710 | Ballyknock (Big)                                 | Cross-carved stone                               |
| ANT 018:054 | D023265   | Toberbilly                                       | Souterrain                                       |
| ANT 018:079 | D077246   | Castlequarter                                    | Mass site: Mass House Hill                       |
| ANT 018:081 | D08502440 | Ballybraddin                                     | Church and graveyard (site of)                   |
| ANT 018:082 | D07472573 | Ballyknock (Little)                              | Graveyard: Killeen                               |
| ANT 018:086 | D09142463 | Tully South                                      | Graveyard  |
| ANT 018:092 | D04862375 | Lisnisk  | Souterrain                                       |
| ANT 019:014 | D21282807 | Cloghs   | Aerial photo site: circular cropmark             |
| ANT 019:027 | D18902290 | Barard   | Four booley houses                               |
| ANT 020:001 | D27182500 | Ardclinis  | Medieval parish church and graveyard             |
| ANT 020:004 | D24862310 | Drumnacur, Tamlaght,<br>Glenariff Mountain Lower | Cairn  |
| ANT 020:006 | D22652361 | Kilmore  | Graveyard  |
| ANT 020:009 | D22632623 | Knockans South,<br>Knockans North                | Enclosure  |
| ANT 020:030 | D231280   | Cushendall                                       | Bullaun  |
| ANT 020:050 | D289236   | Nappan   | Neolithic occupation site                        |
| ANT 020:052 | D270236   | Carrivemurphy, Ardclinis                         | Booleying site                                   |
| ANT 022:006 | C96682095 | Money canon                                      | Mound: probable raised rath                      |
| ANT 022:008 | D00011985 | Caldanagh  | Platform   |
| ANT 022:011 | D01101855 | Ballymacaldrack                                  | Enclosure  |
| ANT 022:032 | C96421598 | Slievenaghy                                      | Souterrain                                       |
| ANT 022:037 | D01771865 | Ballymacaldrack                                  | Graveyard  |
| ANT 023:010 | D11661745 | Scotchomerbane                                   | Standing stone                                   |
| ANT 023:012 | D06821789 | Drumadoon, Cloghmills                            | Enclosure  |
| ANT 023:015 | D07241912 | Mount Hamilton                                   | Island: possibly crannog                         |
| ANT 023:016 | D06411995 | Mount Hamilton                                   | Large enclosure                                  |
| ANT 023:017 | D03591857 | Anticur  | Counterscarp rath                                |
| ANT 023:021 | D05511706 | Lisnaso  | Enclosure  |
| ANT 023:027 | D03512093 | Ballynaloob                                      | Aerial photo site: oval cropmark                 |
| ANT 023:039 | D06771623 | Frosses  | Enclosure  |
| ANT 024:009 | D18531720 | Dungonnell                                       | Fortified outcrop and souterrain?:<br>Dungonnell |
| ANT 024:025 | D21052219 | Glasmullen                                       | Aerial photo site: sub-rectangular structure     |
| ANT 024:026 | D21692202 | Glasmullen                                       | Aerial photo site: enclosure                     |
| ANT 024:037 | D16751700 | Cargan   | Holy well  |

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| ANT 025:024 | D237220   | Clonreagh and Greenaghan<br>– SMR gives possible field system | Booleying site                             |
| ANT 025:026 | D26422142 | Drumnasole  | Enclosure and four structures              |
| ANT 025:031 | D29262150 | Drumnasole  | Fortification                              |
| ANT 026:008 | C98131386 | Moneyleck   | Mound                                      |
| ANT 026:029 | D02061297 | Crushybracken   | Graveyard: Slaghtataggart                  |
| ANT 027:001 | D02551502 | Glenbuck  | Rath and souterrain: Pharaoh's Fort        |
| ANT 027:009 | D05131412 | Killycreen  | Mound                                      |
| ANT 027:010 | D06071324 | Dundermot   | Motte (and site of bailey): Dundermot      |
| ANT 027:020 | D11871489 | Tullykittagh Lower  | Standing stone                             |
| ANT 027:023 | D12121259 | Killygore   | Enclosure                                  |
| ANT 027:027 | D12281025 | Carncoagh   | Standing stone                             |
| ANT 027:035 | D08560962 | Drumfin   | Enclosure                                  |
| ANT 027:038 | D08301125 | Carnlea   | Enclosure                                  |
| ANT 027:045 | D03761295 | Killydonnelly   | Platform rath and souterrain               |
| ANT 027:052 | D03461154 | Killycowan  | Oval cropmark                              |
| ANT 027:055 | D08570988 | Drumfin   | Mound                                      |
| ANT 027:058 | D05551286 | Dromore   | Aerial photo site: cropmark                |
| ANT 027:063 | D08641163 | Ballyreagh  | Aerial photo site: circular cropmark       |
| ANT 027:080 | D108155   | Glenleslie  | Mass rock: Butterstone                     |
| ANT 027:088 | D05860984 | Ballywatermoy   | Souterrain?                                |
| ANT 028:022 | D13911315 | Martinstown   | Enclosure                                  |
| ANT 029:016 | D29571155 | Deer Park Farms   | Enclosure                                  |
| ANT 029:028 | D23981128 | Ticloy  | Large modern enclosure                     |
| ANT 029:037 | D24060983 | Tamybuck  | Standing stone                             |
| ANT 029:039 | D24640986 | Tamybuck  | Wedge tomb                                 |
| ANT 029:045 | D30541447 | Glenarm Demesne   | Circular cropmark                          |
| ANT 029:048 | D30751556 | Cloney, Glenarm   | Mesolithic site                            |
| ANT 029:050 | D31711318 | Mullaghconnelly   | Enclosure                                  |
| ANT 029:058 | D22181185 | Cleggan   | Uncertain                                  |
| ANT 029:074 | D23731055 | Tamybuck  | Aerial photo site: elliptical enclosure    |
| ANT 029:078 | D273105   | Carnalbanagh  | Hut circles                                |
| ANT 029:082 | D28901504 | Bay   | Megalith                                   |
| ANT 029:089 | D257133   | Aughreamlagh  | Enclosure, structures and field boundaries |
| ANT 029:096 | D256109   | Antynanum   | Enclosures and structure                   |
| ANT 029:098 | D23291196 | Ticloy  | Souterrain                                 |
| ANT 029:100 | D29181177 | Munie North   | Standing stone                             |
| ANT 030:008 | D34761130 | Lisnahay South  | Cropmarks                                  |
| ANT 030:013 | D33871340 | Minnis North  | Shell midden                               |
| ANT 031:019 | D00910458 | Garvagh   | Rath                                       |
| ANT 031:040 | D00310767 | Lisnahunshin  | Enclosure                                  |
| ANT 032:006 | D08420775 | Teeshan   | Crannog                                    |
| ANT 032:010 | D09050745 | Loughmagarry  | Enclosure                                  |
| ANT 032:014 | D11380686 | Kirkinriola   | Church site, graveyard and souterrain      |
| ANT 032:015 | D10860627 | Killyflugh  | Enclosure                                  |
| ANT 032:022 | D11820556 | Ballygarvey   | Motte and bailey                           |
| ANT 032:026 | D12220484 | Ballygarvey   | Landscaping feature                        |
| ANT 032:027 | D12140475 | Bottom/Ballygarvey  | Mound                                      |
| ANT 032:030 | D11470308 | Town Parks, (Ballymena)                                       | Mound                                      |
| ANT 032:047 | D06980390 | Galgorm Parks   | Uncisted urn burials                       |
| ANT 032:050 | D10300464 | Ballyloughan, Ballymena                                       | Aerial photo site: circular cropmark       |
| ANT 032:057 | D12450691 | Ballygarvey   | Aerial photo site: circular cropmark       |
| ANT 033:010 | D18130900 | Loughloughan  | Triple cist cairn                          |
| ANT 033:035 | D15830432 | Lisnamurrikin   | Enclosure                                  |

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| ANT 033:039 | D15400363 | Caherty                              | Enclosure                                   |
| ANT 033:043 | D12830587 | Ballygarvey                          | Enclosure                                   |
| ANT 033:060 | D17220738 | Carnkeeran                           | Cairn                                       |
| ANT 034:035 | D25000748 | Buckna                               | Field system and enclosures                 |
| ANT 034:047 | D28420456 | Carrive                              | Enclosure                                   |
| ANT 034:055 | D28070895 | Carnalbanagh                         | Enclosure and souterrain                    |
| ANT 034:056 | D28200897 | Carnalbanagh                         | Souterrain                                  |
| ANT 035:003 | D33260737 | Linford                              | Cairn                                       |
| ANT 035:005 | D34200668 | Ballyhackett, Linford,<br>Drains Bog | Multivallate promontory fort: Knock Dhu     |
| ANT 035:008 | D34870900 | Ballygawn                            | Enclosure                                   |
| ANT 035:029 | D34470564 | Sallagh                              | Uncertain: mound and souterrain             |
| ANT 035:040 | D37680621 | Carnfunnock                          | Raths                                       |
| ANT 035:056 | D39820468 | Blackcave North                      | Cropmark                                    |
| ANT 035:061 | D337078   | Ballycoos                            | Flint quarry                                |
| ANT 035:074 | D32950659 | Drains Bog                           | House sites (2)                             |
| ANT 036:004 | H99099815 | Culnafay, Newferry                   | Mesolithic site                             |
| ANT 036:012 | J01229737 | Culnafay                             | Enclosure                                   |
| ANT 036:027 | D00270018 | Killycarn                            | Mass rock                                   |
| ANT 036:028 | D00220071 | Carmagrim                            | Natural mound                               |
| ANT 037:001 | D02800206 | Ballybeg                             | Enclosure                                   |
| ANT 037:003 | D03790240 | Craignageeragh                       | Rath  |
| ANT 037:012 | D08100239 | Galgorm                              | Enclosure                                   |
| ANT 037:022 | D11220260 | Ballykeel, Ballymena                 | Motte and bailey                            |
| ANT 037:035 | J05669901 | Ballymontenagh                       | Rath  |
| ANT 037:054 | J11889825 | Carnaghts                            | Enclosure                                   |
| ANT 037:055 | D06180207 | Lisnafillon                          | Enclosure                                   |
| ANT 038:002 | D14040175 | Ballymarlagh                         | Dual court tomb                             |
| ANT 038:007 | D14810230 | Crebilly                             | Enclosure                                   |
| ANT 038:012 | D17010273 | Deerfin                              | Enclosure                                   |
| ANT 038:013 | D19290266 | Ballynulto                           | Crannog                                     |
| ANT 038:052 | J21879827 | Whappstown                           | Mound                                       |
| ANT 039:004 | J23839925 | Glenwhirry                           | Enclosure                                   |
| ANT 039:026 | J302974   | Ballyboley                           | Cairn                                       |
| ANT 039:037 | J30579742 | Ballyboley                           | Cropmark                                    |
| ANT 039:043 | D29670220 | Braetown                             | Circular cropmark                           |
| ANT 039:053 | J24099998 | Glenwhirry                           | Structures, enclosures and field boundaries |
| ANT 040:009 | D40090084 | Carnduff                             | Megalithic tomb                             |
| ANT 040:018 | J32849731 | Ballyboley                           | Megalithic tomb                             |
| ANT 040:035 | D39910245 | Town Parks (Larne)                   | Church and graveyard                        |
| ANT 040:039 | D41240182 | Curran And Drumaliss,<br>Larne       | Fortifications                              |
| ANT 040:040 | D41330165 | Curran and Drumaliss,<br>Larne       | Fortifications                              |
| ANT 040:041 | J35409969 | Lowtown                              | Holy well                                   |
| ANT 040:077 | D32710198 | Old Freehold                         | Round cairn                                 |
| ANT 040:080 | D38150006 | Browndod                             | Cropmark                                    |
| ANT 041:004 | D46030220 | Portmuck                             | Church and graveyard                        |
| ANT 041:018 | J47609788 | Gransha/Ballymuldrogh                | Cairn (site of)                             |
| ANT 041:023 | D465023   | PORTMUCK , Isle Of Muck              | Fortifications (remains of)                 |
| ANT 041:033 | D43680280 | Ballyprior Beg                       | Burials                                     |
| ANT 042:019 | J01859602 | Kilvillis, Killylaes                 | Church and graveyard                        |
| ANT 043:020 | J05309191 | Tannaghmore                          | Enclosure                                   |
| ANT 043:021 | J05139259 | Tannaghmore                          | Enclosure                                   |

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| ANT 043:050 | J06559430 | Coolsythe           | Enclosure                           |
| ANT 044:012 | J16859633 | Carncome            | Rath (remains of)                   |
| ANT 044:019 | J22319341 | Ballybracken        | Barrow                              |
| ANT 044:022 | J19569304 | Browndod            | Standing stone                      |
| ANT 044:041 | J20839051 | Tobergill           | Megalithic tomb                     |
| ANT 044:054 | J16579183 | Ladyhill            | Rath                                |
| ANT 044:076 | J16379113 | Ladyhill            | Enclosure                           |
| ANT 045:006 | J25789584 | Carnlea             | Platform rath                       |
| ANT 045:008 | J26969458 | Dunamoy             | Enclosure                           |
| ANT 045:012 | J30579603 | Ballyboley          | Cairn                               |
| ANT 045:022 | J29529301 | Ballycor            | Souterrain                          |
| ANT 045:024 | J31799054 | Little Ballymena    | Rath and souterrain                 |
| ANT 045:028 | J27319310 | Rashee              | Church site and graveyard           |
| ANT 045:029 | J26969285 | Rashee              | Enclosure                           |
| ANT 045:049 | J25969327 | Rashee              | Enclosure                           |
| ANT 045:060 | J24769121 | Kilbride            | Deserted settlement (site of)       |
| ANT 045:065 | J24199377 | Drumadarragh        | Megalithic tomb                     |
| ANT 045:083 | J29549058 | Ballyclare          | Cropmark                            |
| ANT 045:116 | J307940   | Ballycor            | Souterrain                          |
| ANT 045:120 | J28509217 | Ballyclare          | Souterrain                          |
| ANT 046:011 | J35169576 | Ballygowan          | Enclosure                           |
| ANT 046:029 | J35659135 | Middle Division     | Cairn?: Carnwhissock                |
| ANT 046:034 | J32779056 | Calhame             | Enclosure (site of)                 |
| ANT 046:038 | J35109603 | Ballygowan          | Standing stone (site of)            |
| ANT 047:001 | J45369660 | Ballyedward         | Moated site with internal structure |
| ANT 047:004 | J44939501 | Redhall             | Tower house?                        |
| ANT 047:011 | J42469316 | North East Division | Enclosure                           |
| ANT 047:015 | J44279143 | Ballyhill           | Bawn                                |
| ANT 047:017 | J45229105 | Dobbsland           | Enclosure                           |
| ANT 047:038 | J45299295 | Forthill            | Mound or enclosure (site of)        |
| ANT 047:041 | J43149242 | Ballyhill           | Mound                               |
| ANT 047:054 | J42899117 | Marshallstown       | C17th dettlement                    |
| ANT 047:059 | J48319360 | Castletown          | Flints                              |
| ANT 048:002 | J01658574 | Ballynaleny         | Enclosure                           |
| ANT 048:010 | J02028760 | Carmorn             | Rath                                |
| ANT 048:014 | J02128781 | Cargin              | Enclosure                           |
| ANT 048:015 | J00448911 | Ballydugennan       | Enclosure                           |
| ANT 048:018 | J02808688 | Ballynamullan       | Enclosure                           |
| ANT 048:025 | J02479754 | Ballylurgan         | Aerial photo site                   |
| ANT 048:032 | J08168715 | Ballylurgan         | Mass rock                           |
| ANT 049:020 | J08428972 | Shanes Castle Park  | Motte and bailey                    |
| ANT 049:032 | J10008765 | Shanes Castle Park  | Raised rath                         |
| ANT 049:036 | J09138773 | Shanes Castle Park  | Enclosure                           |
| ANT 049:042 | J06858744 | Creggan             | Enclosure                           |
| ANT 049:045 | J06678716 | Creggan             | Enclosure                           |
| ANT 049:063 | J09078841 | Shanes Castle Park  | Enclosure                           |
| ANT 050:029 | J19388806 | Donegore            | Souterrain                          |
| ANT 050:032 | J20678819 | Tobergill           | Long mound                          |
| ANT 050:046 | J20598781 | Donegore            | Souterrain                          |
| ANT 050:061 | J19958515 | Dunadry             | Cairn                               |
| ANT 050:065 | J19958455 | Straidballymorris   | Rath                                |
| ANT 050:068 | J19008427 | Shaneoguestown      | Mound                               |
| ANT 050:070 | J18378425 | Shaneoguestown      | Rath                                |
| ANT 050:071 | J18598478 | Shaneoguestown      | Souterrain                          |

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| ANT 050:072 | J16918463 | Muckamore                          | Rath   |
| ANT 050:075 | J17108552 | Ballycraigy, Antrim                | Mound  |
| ANT 050:085 | J16288408 | Oldstone                           | Castle (site of)                                 |
| ANT 050:110 | J14628659 | Balloo, Antrim                     | Abbey  |
| ANT 050:112 | J16718694 | Stiles                             | Souterrain                                       |
| ANT 050:141 | J15368630 | Balloo, Antrim                     | Enclosure  |
| ANT 050:149 | J15238509 | Tirgracey                          | Aerial photo site: large circular cropmark       |
| ANT 050:163 | J20388920 | Tobergill                          | Aerial photo site: circular cropmark             |
| ANT 050:178 | J21248918 | Tobergill                          | Circular ditch                                   |
| ANT 051:010 | J24508662 | Ballycushan                        | Barrow   |
| ANT 051:031 | J31818844 | Straidnahanna                      | Barrow   |
| ANT 051:035 | J31228517 | Ballyhenry                         | Rath   |
| ANT 051:039 | J27218542 | Carnanee                           | Rath (remains of)                                |
| ANT 051:056 | J25048576 | Ballymartin                        | Flat topped mound                                |
| ANT 051:060 | J23968447 | Cloghanduff                        | Rath (remains of)                                |
| ANT 051:065 | J24008770 | Moyadam                            | Medieval church site                             |
| ANT 051:071 | J22948556 | Templepatrick                      | Holy well (site of) St Patrick's                 |
| ANT 051:093 | J24608569 | Ballymartin                        | Barrow? Remains of                               |
| ANT 051:100 | J30888531 | Ballyhenry                         | Enclosure  |
| ANT 051:103 | J30128544 | Ballycraigy                        | Cropmark   |
| ANT 051:112 | J26548420 | Craigarogan                        | Aerial photo site: cropmark                      |
| ANT 051:114 | J25168464 | Cloghanduff, Ballynabarnish        | Aerial photo site: circular cropmarks            |
| ANT 051:120 | J26798754 | Ballypalady                        | Aerial photo site: elliptical cropmark           |
| ANT 051:137 | J23538987 | Ballywee                           | Aerial photo site: circular and linear cropmarks |
| ANT 051:138 | J29858931 | Bruslee                            | Aerial photo site: small circular cropmark       |
| ANT 051:148 | J26808485 | Carnanee                           | Cairn (site of)                                  |
| ANT 052:028 | J39468857 | Middle Division, Carrickfergus     | Flax dams  |
| ANT 052:043 | J37598825 | West Division                      | Tree ring  |
| ANT 052:056 | J33218471 | Ballyduff                          | Mound (site of)                                  |
| ANT 052:062 | J41498755 | Carrickfergus                      | Fortified house on site of Franciscan friary     |
| ANT 052:068 | J33658971 | Lisglass                           | Standing stone (site of)                         |
| ANT 052:082 | J40748733 | West Division                      | Fortification (site of)                          |
| ANT 052:124 | J35088957 | West Division                      | Mound?   |
| ANT 052:126 | J38788947 | Middle Division                    | Enclosure  |
| ANT 052:129 | J41769047 | North East Division                | Rath   |
| ANT 052:132 | J35968916 | West Division                      | Cropmarks: enclosure?                            |
| ANT 052:137 | J41398745 | Carrickfergus                      | Tower house                                      |
| ANT 052:140 | J35848528 | Jordanstown                        | Souterrain                                       |
| ANT 052:143 | J36288617 | West Division                      | Mound and possible enclosure                     |
| ANT 052:145 | J40459074 | Middle Division                    | Early Christian site?                            |
| ANT 052:154 | J41568775 | East Central Ward, Carrickfergus   | Wall remains C17th                               |
| ANT 053:009 | J42549036 | North East Division, Carrickfergus | Rath   |
| ANT 054:004 | J12788320 | Corbally                           | Platform rath                                    |
| ANT 054:008 | J12248102 | Dungonnell                         | Motte  |
| ANT 054:009 | J12758051 | Corbally                           | Platform rath                                    |
| ANT 054:010 | J10788004 | Ballynageeragh                     | Rath   |
| ANT 054:013 | J10027880 | Ardmore                            | Enclosure  |
| ANT 054:018 | J11877800 | Ballymacilhoyle                    | Rath   |
| ANT 054:023 | J11138092 | Ballyginniff                       | Castle   |
| ANT 054:032 | J12028167 | Dungonnell                         | Enclosure  |



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| ANT 054:035 | J11738084 | Ballyginniff                          | Enclosure   |
| ANT 054:058 | J11337946 | Ballynageeragh                        | Enclosure (chart)                                     |
| ANT 054:063 | J12457928 | Ballyquillin                          | Enclosure (chart)                                     |
| ANT 055:006 | J13328318 | Deer Park                             | Mound   |
| ANT 055:010 | J13748281 | Deer Park                             | Rath  |
| ANT 055:013 | J14248335 | Deer Park                             | Rectangular enclosure                                 |
| ANT 055:024 | J19308361 | Shaneoguestown                        | Platform rath   |
| ANT 055:031 | J22198340 | Rickamore                             | Enclosure with souterrains                            |
| ANT 055:066 | J18757998 | Straidhavern                          | Enclosure   |
| ANT 055:067 | J18558020 | Lisnataylor                           | Enclosure   |
| ANT 055:089 | J15547734 | Crosshill                             | Rath  |
| ANT 055:091 | J15167808 | Ballynadrentagh                       | Enclosure   |
| ANT 055:102 | J13408318 | Deer Park                             | Landscape feature                                     |
| ANT 055:116 | J15728236 | Crookedstone                          | Barrow  |
| ANT 055:125 | J18458093 | Lisnataylor                           | Enclosure   |
| ANT 055:133 | J20217889 | Boltnaconnell                         | Rath  |
| ANT 055:137 | J13318109 | British                               | Enclosure   |
| ANT 055:152 | J16018081 | British                               | Aerial photo site: circular cropmark, bivallate rath? |
| ANT 055:153 | J17167965 | Tully                                 | Aerial photo site: circular cropmark                  |
| ANT 055:155 | J18058015 | Tully                                 | Aerial photo site: small circular cropmark. Barrow?   |
| ANT 055:178 | J21877822 | Ballyhill Lower                       | Enclosure (site of)                                   |
| ANT 055:181 | J21577777 | Boltnaconnell, Ballykennedy           | Rath (site of)  |
| ANT 055:188 | J19288024 | Lisnataylor                           | Enclosure   |
| ANT 055:196 | J18717878 | Straidhavern                          | Enclosure (site of)                                   |
| ANT 055:201 | J15568350 | Ballyarnot                            | Enclosure (site of)                                   |
| ANT 055:209 | J15908134 | Killealy                              | Enclosure (site of)                                   |
| ANT 055:216 | J15188057 | British                               | Cropmark  |
| ANT 055:231 | J13188179 | Dungonnell                            | Enclosure (site of)                                   |
| ANT 055:256 | J13487826 | Ballynadrentagh                       | Enclosure (site of)                                   |
| ANT 055:261 | J13897764 | Ballynadrentagh                       | Enclosure (site of)                                   |
| ANT 056:001 | J22968224 | Rickamore                             | Enclosure, rath                                       |
| ANT 056:002 | J22878159 | Ballymather Lower                     | Enclosure, rath                                       |
| ANT 056:009 | J26908325 | Craigarogan                           | Enclosure   |
| ANT 056:025 | J27598029 | Ballyutoag                            | Rath  |
| ANT 056:027 | J24607780 | Carnaghliiss                          | Cairn?  |
| ANT 056:065 | J27798359 | Craigarogan                           | Cropmark  |
| ANT 056:079 | J25428219 | Ballynabarnish                        | Circular cropmark                                     |
| ANT 056:080 | J25058298 | Ballynabarnish                        | Cropmark: two concentric circles                      |
| ANT 056:087 | J23668381 | Toberagnee and Ballynabarnish         | Ancient road  |
| ANT 056:092 | J2780     | Ballyvaston                           | Settlement site                                       |
| ANT 057:004 | J33748242 | Dunanney                              | Rath  |
| ANT 057:014 | J34127926 | Greencastle – SMR descheduled in 1982 | Fortification (site of)                               |
| ANT 057:016 | J35178193 | Whiteabbey                            | Tree ring   |
| ANT 058:007 | J09737495 | Gartree                               | Tree plantation                                       |
| ANT 058:018 | J11747629 | Largy – SMR possibly 18th century     | Graveyard   |
| ANT 058:025 | J11337705 | Ballyclan                             | Rath  |
| ANT 058:027 | J12387108 | Ballyvanen                            | Cropmark or barrow                                    |
| ANT 058:041 | J09347500 | Gartree                               | Enclosure   |

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| ANT 058:042 | J09917588 | Ballymacmary, Gartree   | Aerial photo site: cropmark                  |
| ANT 058:048 | J11077673 | Gortnagallon  | Enclosure (chart)                            |
| ANT 058:053 | J11637587 | Largy   | Enclosure (chart)                            |
| ANT 059:001 | J15127717 | Crosshill   | Enclosure (chart)                            |
| ANT 059:003 | J15877683 | Crosshill, Crumlin  | Motte  |
| ANT 059:005 | J14627636 | Ballygortgarve, Crumlin   | Enclosure (chart)                            |
| ANT 059:013 | J17167652 | Ballydonaghy  | Enclosure                                    |
| ANT 059:020 | J19847645 | Aughnamullan  | Enclosure                                    |
| ANT 059:021 | J19257578 | Ballydonaghy  | Enclosure                                    |
| ANT 059:025 | J20627648 | Ballykennedy  | Enclosure                                    |
| ANT 059:032 | J22287638 | Dundrod   | Enclosure                                    |
| ANT 059:033 | J21037618 | Ballykennedy  | Enclosure                                    |
| ANT 059:049 | J19137360 | Ballymoneymore  | Rath with annex                              |
| ANT 059:054 | J18537500 | Ballydonaghy  | Rath   |
| ANT 059:057 | J17377463 | Ballydonaghy  | Rath   |
| ANT 059:062 | J17777353 | Tullynewbane  | Enclosure                                    |
| ANT 059:066 | J16587337 | Ballyminymore   | Enclosure                                    |
| ANT 059:076 | J18257253 | Ballynacoy  | Mound  |
| ANT 059:080 | J18417205 | Ballynacoy  | Enclosure                                    |
| ANT 059:097 | J22897630 | Budore  | Enclosures                                   |
| ANT 059:105 | J20867119 | Ballymacward Lower  | Rath   |
| ANT 059:109 | J21807191 | Ballymacward Lower  | Aerial photo site: circular enclosure        |
| ANT 059:117 | J16237450 | Ballydonaghy  | Mound  |
| ANT 059:122 | J22607710 | Carnaghliiss  | Aerial photo site: circular enclosure        |
| ANT 059:128 | J18987329 | Tullynewbane  | Enclosure (chart)                            |
| ANT 059:148 | J15957515 | Gobrana   | Enclosure (chart)                            |
| ANT 059:165 | J17467144 | Ballypitmave/Crew   | Enclosure                                    |
| ANT 059:167 | J13517393 | Aghnadarragh  | Enclosure                                    |
| ANT 059:169 | J13987377 | Aghnadarragh  | Enclosure                                    |
| ANT 060:018 | J28857735 | Legoniel  | Megalith                                     |
| ANT 060:022 | J29697615 | Ballygomartin   | Rath   |
| ANT 060:028 | J31227545 | Edenderry   | Enclosure (site of)                          |
| ANT 060:031 | J30727360 | Fallsward   | Rath (site of)                               |
| ANT 060:042 | J31087625 | Ballysillan Lower   | Enclosure (Site of)                          |
| ANT 060:050 | J23257550 | Budore  | Souterrain                                   |
| ANT 060:061 | J29357481 | Divis   | Cairn  |
| ANT 060:062 | J27607207 | Englishtown   | Cropmarks: two raths?                        |
| ANT 060:071 | J29227445 | Ballymurphy   | Flint working site                           |
| ANT 060:079 | J24857165 | Slievenacloy  | Mass rock                                    |
| ANT 061:019 | J34117461 | Town Parks Belfast – SMR<br>urban excavation 18th<br>and 19th centuries | Post-Medieval Belfast                        |
| ANT 062:009 | J11606565 | Ballymacilrany  | Probable rath (site of)                      |
| ANT 062:054 | J11436800 | Ballinderry   | Crannog?                                     |
| ANT 063:003 | J14856885 | Ballymaclose  | Enclosure                                    |
| ANT 063:017 | J18206910 | Drumanduff  | Enclosure                                    |
| ANT 063:020 | J18297004 | Lurganteneil  | Enclosure, counterscarp rath                 |
| ANT 063:022 | J19647015 | Derrykillultagh   | Enclosure                                    |
| ANT 063:037 | J20446591 | Ballylough  | Motte and bailey                             |
| ANT 063:046 | J16736673 | Loughrelish   | Enclosure                                    |
| ANT 063:048 | J15506645 | Cluntirriff   | Platform rath                                |
| ANT 063:049 | J15316590 | Moygarriff  | Enclosure                                    |
| ANT 063:050 | J15206523 | Moygarriff  | Enclosure                                    |
| ANT 063:055 | J15556575 | Moygarriff  | Church site, graveyard, standing stone, well |

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| ANT 063:062 | J20706590 | Ballyellough                                    | Megalith and enclosure  |
| ANT 063:083 | J19856886 | Derrykillultagh                                 | Rath  |
| ANT 063:092 | J20606885 | Ballynadolly                                    | Circular cropmark   |
| ANT 063:095 | J17206673 | Moneycrumog                                     | Platform rath   |
| ANT 064:027 | J25977108 | Ballycollin                                     | Cairn   |
| ANT 064:033 | J26016608 | Magheralave                                     | Tree ring   |
| ANT 064:042 | J28426666 | Lambeg North                                    | Friary  |
| ANT 064:082 | J24566818 | Aghalislone                                     | Rath  |
| ANT 064:091 | J32176911 | Malone Upper                                    | House and bawn  |
| ANT 064:093 | J32587098 | Malone Upper                                    | House   |
| ANT 066:004 | J11106310 | Derrynaseer                                     | Enclosure   |
| ANT 066:015 | J12026285 | Aghadrumglasny                                  | Enclosure   |
| ANT 067:008 | J17906303 | Maghaberry                                      | Rath  |
| ANT 067:023 | J15706275 | Magheramesk                                     | Enclosure   |
| ANT 067:043 | J18036227 | Derrynisk                                       | Standing stone  |
| ANT 067:056 | J17246298 | Maghaberry                                      | Rath  |
| ANT 067:063 | J16686119 | Trummery  | Rath  |
| ANT 067:067 | J15876187 | Magheramesk                                     | Enclosure   |
| ANT 067:069 | J18946175 | Creenagh  | Rectangular enclosure   |
| ANT 068:007 | J23836460 | Ballymacoss                                     | Enclosure   |
| ANT 068:008 | J27506478 | North Ward, Lisburn                             | Fort (site of)  |
| ANT 068:009 | J25426393 | Old Warren, Lisburn                             | Well  |
| ARM 002:005 | H92526354 | Maghera   | Grange? (Site of)   |
| ARM 004:002 | H91635814 | Derrycoose                                      | Rath  |
| ARM 006:013 | J033582   | Kilvergan                                       | Church and graveyard (site of): Kilvergan Hill  |
| ARM 007:004 | H80764916 | Drumsallan Lower                                | Enclosure   |
| ARM 007:006 | H79234968 | Killymaddy                                      | Rath  |
| ARM 007:008 | H81784953 | Laraghshankill                                  | Church and graveyard (site of)  |
| ARM 007:009 | H81405162 | Carrickaness                                    | Enclosure   |
| ARM 008:004 | H90385405 | Coragh  | Rath  |
| ARM 008:009 | H90785214 | Levalleglish, Loughgall                         | Multiperiod church site and graveyard:<br>Loughgall; Levallieglish                    |
| ARM 008:014 | H87055094 | Grange Blundel                                  | Rath: Moores Island   |
| ARM 008:023 | H88825025 | Moneycree                                       | Church and graveyard (site of): Killoter,<br>The Graveyard Field                      |
| ARM 008:026 | H83384999 | Annamoy   | Enclosure: tree ring?   |
| ARM 008:043 | H85385168 | Mullanary                                       | Aerial photo site: oval enclosure   |
| ARM 008:048 | H85135133 | Mullyleggan                                     | Aerial photo site: circular enclosure<br>with annex                                   |
| ARM 009:007 | J00355175 | Maghon – SMR brick<br>structure is 19th century | Church (site of) and holy well: Maghon<br>Well or St Patrick’s Well                   |
| ARM 009:028 | H92515032 | Creenagh  | Aerial photo site: circular enclosure   |
| ARM 010:015 | J04625432 | Lisnaminty                                      | Standing stones   |
| ARM 011:009 | H78564453 | Manooney  | Rath  |
| ARM 011:010 | H78314370 | Kennedies                                       | Barrow (2)  |
| ARM 011:013 | H76014288 | Fairview or Mucklagh                            | Tynan Well Cross  |
| ARM 011:025 | H82464524 | Ballydoo  | Aerial photo site: enclosure  |
| ARM 012:003 | H86094702 | Aghanore  | Rath or enclosure   |
| ARM 012:004 | H88194713 | Mullynure                                       | Church, house and enclosure: court hill,<br>bishop’s court or palace, Mullinure Abbey |
| ARM 012:007 | H84574622 | Ballybrolly                                     | Passage tomb (site of)  |
| ARM 012:008 | H84634608 | Ballybrolly                                     | Cairn - passage tomb? and megalith  |
| ARM 012:014 | H83874546 | Tray  | Earthwork - ritual pool: The King’s Stables   |
| ARM 012:031 | H91044870 | Turcarra  | Enclosure   |

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| ARM 012:039 | H91414478 | Tirnascoche            | Church (site of) and graveyard in enclosure   |
| ARM 012:059 | H87724504 | Corporation, Armagh    | Medieval dry-built masonry well   |
| ARM 012:062 | H91074448 | Drumbee Beg            | Island, possibly crannog in Lowry's Lough   |
| ARM 012:073 | H87724310 | Ballyheridan           | Standing stone?   |
| ARM 012:098 | H87444520 | Armagh                 | Church: Muirchu's 'Northern Church'   |
| ARM 012:103 | H87684502 | Corporation (Armagh)   | Settlement site   |
| ARM 013:006 | H93664664 | Rockmacreeeny          | Rath: Rockmacreeeny Fort  |
| ARM 013:036 | H947490   | Rich Hill or Legacorry | Aerial photo: circular cropmarks  |
| ARM 014:019 | J03284649 | Ballymore, Tandragee   | Aerial photo: large circular enclosure  |
| ARM 015:024 | H73883750 | Ardgonnell             | Castle: Ardgonnell Castle (destroyed)   |
| ARM 015:029 | H75763697 | Drumgose               | Enclosure   |
| ARM 015:031 | H75413661 | Knockbane              | Enclosure   |
| ARM 016:001 | H85524234 | Lisbanoe               | Large enclosure (rath?) and souterrain  |
| ARM 016:010 | H87344026 | Drumconwell            | Rath  |
| ARM 016:014 | H86523978 | Ballynagalliagh        | Rath reused as tree ring  |
| ARM 016:021 | H86243907 | Ballynagalliagh        | Bivallate rath  |
| ARM 016:025 | H87833892 | Killyfaddy             | Linear earthwork: The Danes Cast (part of)  |
| ARM 016:034 | H86823824 | Balleer                | Rath, reused as tree ring   |
| ARM 016:045 | H84443642 | Killyreavy             | Enclosure   |
| ARM 016:049 | H85763753 | Tassagh                | Enclosure   |
| ARM 016:057 | H84473812 | Drumhirk               | Rath  |
| ARM 016:058 | H92344134 | Cavanagrow             | Enclosure: Harvey's Fort?   |
| ARM 016:066 | H89463731 | Ballymacanab           | Souterrain  |
| ARM 017:002 | H99824251 | Moyrourkan             | Rath  |
| ARM 017:009 | H99344097 | Shanecrackan Beg       | Enclosure   |
| ARM 017:010 | H96354060 | Gosford Demesne        | Castle: Gosford Castle  |
| ARM 017:015 | J01833996 | Mullanary              | Rath  |
| ARM 017:023 | H98043756 | Drumalaragh            | Rath  |
| ARM 017:026 | H97673848 | Maghnavey              | Rath  |
| ARM 017:034 | H97084012 | Gosford Demesne        | Rath: Crunaght Fort   |
| ARM 017:038 | H96603760 | Kilbracks              | Church (site of), graveyard and holy well:<br>Kilclooney, Garthfyding or Clancarney |
| ARM 017:044 | H99253815 | Killycarn Upper        | Rath  |
| ARM 017:052 | J01614093 | Corlust                | Burial thorn  |
| ARM 017:053 | J01134162 | Ballysheil Beg         | Rath  |
| ARM 017:062 | J02214156 | Corlust                | Aerial photo: oval enclosure  |
| ARM 018:008 | J03634127 | Corernagh              | Rath  |
| ARM 018:016 | J03993927 | Ballyreagh             | Rath  |
| ARM 018:023 | J03643819 | Ballynaleck            | Enclosure   |
| ARM 018:025 | J03533781 | Ballynaleck            | Rath  |
| ARM 018:027 | J04733766 | Demoan                 | Rath: Banker's Fort   |
| ARM 018:028 | J05343764 | Demoan                 | Tree ring, possible reused rath   |
| ARM 019:011 | H79023149 | Listarkelt             | Rath, reused as tree ring   |
| ARM 019:020 | H79492977 | Mullyard               | Souterrain  |
| ARM 021:024 | J01373180 | Lisadian               | Tree ring   |
| ARM 021:032 | H96273629 | Ballylane              | Enclosure   |
| ARM 022:007 | J02473104 | Rathcarbry             | Enclosure   |
| ARM 022:009 | J03583598 | Lisagree               | Rath  |
| ARM 022:017 | J07103110 | Goragh                 | Linear earthwork: The Danes Cast (part of)<br>also Black Pig's Glen                 |
| ARM 022:018 | J06213660 | Demoan                 | Bullaun   |
| ARM 023:001 | H79322969 | Doohat Or Crossreagh   | Souterrain: The Fairy Cove  |
| ARM 024:002 | H87042859 | Aughnagurgan           | Portal tomb   |
| ARM 025:008 | J02332617 | Carrickcloghan         | Rath  |

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| ARM 025:012 | H96222802 | Cavanakill                                     | Cairn: cairn hill  |
| ARM 025:015 | J02012701 | Carrickcloghan                                 | Rath   |
| ARM 026:006 | J04172822 | Maghernahely, Bessbrook                        | Rath   |
| ARM 026:010 | J02672723 | Eshwary, Carrickcloghan                        | Enclosure  |
| ARM 026:019 | J07652949 | Carnbane                                       | Megalithic tomb,- passagetomb?: Carnbane   |
| ARM 026:022 | J02692866 | Eshwary  | Megalithic tomb - court tomb?  |
| ARM 026:026 | J03252823 | Carrickcroppan                                 | Standing stone   |
| ARM 026:045 | J06952662 | Carnagat                                       | Standing stone   |
| ARM 026:049 | J07312740 | Carnagat, Newry                                | Aerial photo: cropmark   |
| ARM 028:003 | H95482175 | Dorsy (Cavan O'hanlon),<br>Dorsy Or Roxborough | Multiple cist cairn: The Moate   |
| ARM 028:015 | J02601768 | Cloghinny                                      | Souterrain: Shankill   |
| ARM 028:016 | H94392232 | Finiskin                                       | Enclosure  |
| ARM 029:004 | J04472136 | Clonlum  | Court tomb: North Cairn  |
| ARM 029:014 | J05382158 | Seafin   | Linear earthwork: The Danes Cast (part of)                                       |
| ARM 029:025 | J09442242 | Fathom Lower                                   | Enclosure: The Old Fort  |
| ARM 029:037 | J04322361 | Tamnaghbane                                    | Souterrain: Kill-Oguey   |
| ARM 030:001 | H89271690 | Corliss  | Bivallate rath and souterrain: Corliss Fort,<br>The Beech Fort Or Donaghy's Fort |
| ARM 030:013 | H92411324 | Drummuckavall                                  | Cairn?: Craiganoran  |
| ARM 030:020 | H88291457 | Cornahove                                      | Enclosure  |
| ARM 030:023 | H88031616 | Drumgose                                       | Crannog? In Lough Ross   |
| ARM 030:026 | H92411588 | Urcher   | Church and graveyard: Killyoughran   |
| ARM 031:003 | H99031456 | Tullydonnell (Gage)                            | Counterscarp rath  |
| ARM 031:010 | J02401468 | Carrickastickan                                | Rath   |
| ARM 031:015 | J01451524 | Carrickastickan                                | Enclosure  |
| ARM 031:018 | H99411549 | Carrive  | Enclosure  |
| ARM 032:002 | J03831477 | Carrickbroad                                   | Round cairn with cist: Cofracloghy   |
| ARM 032:008 | J03401388 | Tievecrom                                      | Rath   |
| ARM 032:013 | J02871526 | Tievecrom                                      | Cashel   |
| ARM 032:018 | J02871526 | Tievecrom                                      | Standing stone   |
| DOW 001:005 | J400795   | Hollywood                                      | Mesolithic site  |
| DOW 001:014 | J45218183 | Ballygrot                                      | Rath   |
| DOW 001:016 | J45488296 | Ballygrot, Helen's Bay                         | Enclosure  |
| DOW 001:028 | J46277873 | Ballysallagh Minor                             | Rath   |
| DOW 001:032 | J46177912 | Ballysallagh Minor                             | Tree ring: Archbishop's Clump  |
| DOW 001:038 | J44908094 | Ballyrobert                                    | Cross  |
| DOW 002:014 | J57257904 | Hogstown                                       | Standing stone (Removed)   |
| DOW 002:024 | J48667835 | Lisbane  | Rath: Thora's Fort   |
| DOW 003:003 | J58828009 | Donaghadee                                     | Motte: Donaghadee Motte  |
| DOW 005:002 | J38647568 | Ballymaghan                                    | Motte  |
| DOW 005:033 | J44107364 | Ballyoran                                      | Site of Medieval church and graveyard:<br>Ballyoran                              |
| DOW 005:037 | J41487294 | Ballybeen                                      | Enclosure and possible souterrain  |
| DOW 005:043 | J41117419 | Ballyregan                                     | Holy well  |
| DOW 005:049 | J45267537 | Killarn  | Aerial photo site  |
| DOW 005:052 | J47647326 | Scрабо   | Aerial photo site  |
| DOW 005:065 | J44247330 | Ballyoran                                      | Medieval settlement site   |
| DOW 005:067 | J43077289 | Ballylisbredan                                 | C17th water mill   |
| DOW 005:071 | J47477185 | Killynether                                    | Chair-shaped stone   |
| DOW 006:005 | J57577738 | Ballyvester                                    | Enclosure  |
| DOW 006:022 | J492739   | Newtownards                                    | Graveyard  |
| DOW 006:500 | J49397489 | Corporation North                              | Ballycopeland Windmill   |
| DOW 007:012 | J59357610 | Ballycopeland, Millisle                        | Windmill   |

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| DOW 008:001 | J28856688  | Ballyskeagh  | Enclosure   |
| DOW 009:007 | J37887073  | Castlereagh  | Barrow  |
| DOW 009:008 | J36846997  | Lisnabreeny  | Enclosure   |
| DOW 009:017 | J37076831  | Knockbreckan   | Enclosure (rath?)                                       |
| DOW 009:036 | J32726770  | Ballynahatty   | Henge and passage tomb                                  |
| DOW 009:041 | J34196565  | Ballycowan   | Enclosure   |
| DOW 009:043 | J33586501  | Leveroge   | Rath  |
| DOW 009:066 | J35956684  | Knockbreckan   | Enclosures (3)  |
| DOW 010:001 | J38837108  | Braniel  | Rath  |
| DOW 010:006 | J39646987  | Crossnacreevy  | Enclosure   |
| DOW 010:023 | J45446863  | Carnasure, Comber  | Mound (unsure)  |
| DOW 010:024 | J45676878  | Carnasure, Comber  | Enclosure   |
| DOW 010:031 | J48287046  | Ballyrickard   | Motte   |
| DOW 010:043 | J45196762  | Carnasure  | Enclosure   |
| DOW 010:044 | J44516728  | Ballywilliam   | Enclosure   |
| DOW 010:049 | J43336585  | Ballyrush  | Bivallate rath  |
| DOW 010:052 | J41296624  | Tullyhubbert   | Enclosure (rath?)                                       |
| DOW 010:064 | J39756658  | Moneyreagh   | Aerial photo site                                       |
| DOW 010:069 | J46106915  | Town Parks (Comber)  | Mound: Mound Distillery                                 |
| DOW 010:071 | J46216999  | Mount Alexander, Comber                                      | Standing stone?   |
| DOW 011:010 | J58306814  | Rosemount  | Grey Abbey: Cistercian abbey                            |
| DOW 011:020 | J50376538  | Ringneill  | Barrow  |
| DOW 011:028 | J48746735  | Castle Espie   | Mesolithic occupation site                              |
| DOW 012:005 | J59916983  | Tullykevin   | Platform rath: Haw Hill                                 |
| DOW 012:014 | J619661    | Balliggan  | Rath  |
| DOW 013:009 | J14496121  | Risk   | Landscape feature: old hermitage                        |
| DOW 013:015 | J13905974  | Ballymakeonan  | Enclosure   |
| DOW 013:031 | J10535922  | Tullyanaghan   | Enclosure   |
| DOW 013:034 | J10686123  | Kilmore  | Graveyard: The Planters' Graveyard                      |
| DOW 014:026 | J27526001  | Ballyhomra   | Enclosure   |
| DOW 014:037 | J26626273  | Ballintine   | Rath: Ballintine Rath                                   |
| DOW 014:042 | J25226074  | Carnbane   | Mound   |
| DOW 014:044 | J27936198  | Taghnabrick  | Enclosure   |
| DOW 014:048 | J24255864  | Hillsborough – SMR dates<br>two phases – 1760 and<br>1810    | Former market house, later court house:<br>Hillsborough |
| DOW 015:021 | J34885992  | Carrickmaddyroe  | Rath  |
| DOW 015:031 | J38066109  | Craignasasonagh  | Standing stone  |
| DOW 015:032 | J38376307  | Ouley  | Enclosure (destroyed)                                   |
| DOW 015:040 | J34466109  | Ballycarngannon  | Aerial photo site                                       |
| DOW 015:042 | J3436 6105 | Ballycarngannon  | Aerial photo site                                       |
| DOW 015:047 | J33435976  | Creedy   | Aerial photo site                                       |
| DOW 016:002 | J40666239  | Ballycloughan  | Rath  |
| DOW 016:010 | J46606324  | Tullynagee   | Uncertain: Breeze's Grave                               |
| DOW 016:021 | J46905892  | Raffrey  | Rath: The Fort  |
| DOW 016:033 | J39395981  | Lisdalgan  | Raised rath: The Moat                                   |
| DOW 016:057 | J41415910  | Ballyagherty   | Enclosure and windmill (stump):<br>Windmill Hill        |
| DOW 017:021 | J51786141  | Killinakin – SMR – two<br>gravestones dated 1782<br>and 1807 | Private graveyard                                       |
| DOW 017:031 | J50766285  | Ballymartin  | Cup marked stone  |
| DOW 018:011 | J61996144  | Ballygraffan   | Enclosure   |
| DOW 018:026 | J59386393  | Nuns Quarter   | Aerial photo site                                       |

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| DOW 020:012 | J13965577  | Kilfullert   | Rath  |
| DOW 020:026 | J16025601  | Ballyleny  | Enclosure   |
| DOW 020:028 | J15155649  | Taughlumny   | Rath  |
| DOW 020:029 | J14245679  | Drumnabreeze                                       | Tree ring   |
| DOW 020:039 | J17185674  | Lisnashanker                                       | Enclosure   |
| DOW 020:045 | J17095486  | Islandderry  | Enclosure   |
| DOW 020:048 | J19265552  | Magherabeg   | Platform rath   |
| DOW 020:069 | J15565244  | Tullycarn  | Square and circular enclosures - tree rings?                |
| DOW 020:072 | J14245160  | Ballygunaghan, Black Skull                         | Enclosure - rath?   |
| DOW 020:078 | J13925356  | Monree   | Rath  |
| DOW 020:089 | J1078 5377 | Annaghanoon  | Enclosure   |
| DOW 020:092 | J11835472  | Banogue  | Enclosure   |
| DOW 021:020 | J27125601  | Drumlough  | Rath  |
| DOW 021:023 | J28875383  | Ballykeel, Growell                                 | Crannog   |
| DOW 021:040 | J21035230  | Drumbroneth  | Rath  |
| DOW 021:048 | J20605318  | Ballyvicknacally, Dromore                          | Motte and bailey: Dromore Mound                             |
| DOW 021:051 | J20095323  | Dromore  | Tower house: Dromore Castle                                 |
| DOW 021:072 | J27945615  | Ballylintagh                                       | Aerial photo site   |
| DOW 022:017 | J34445590  | Magheraknock                                       | Hilltop enclosure: Magheraknock Fort                        |
| DOW 022:023 | J38735791  | Tonaghmore   | Rath  |
| DOW 022:034 | J36685487  | Glasdrumman  | Cashel  |
| DOW 022:039 | J34855377  | Ballykine Lower                                    | Enclosure   |
| DOW 022:042 | J33675280  | Ballykine  | Enclosure - rath?   |
| DOW 023:015 | J449552    | Barnamaghery                                       | Cashel  |
| DOW 023:021 | J48465401  | Ballywillin  | Enclosure   |
| DOW 023:027 | J43495267  | Rademan  | Platform rath   |
| DOW 023:050 | J39715280  | Creevyargon or Ballylone<br>Little                 | Aerial photo site   |
| DOW 024:007 | J51355760  | Ballygeegan  | Standing stone  |
| DOW 024:010 | J52745820  | Rathgorman   | Motte and bailey  |
| DOW 024:013 | J52365695  | Ballymacarron                                      | Rath  |
| DOW 024:015 | J53675664  | Ringdufferin                                       | Castle, possibly tower-house                                |
| DOW 024:021 | J50995494  | Tullyveery, Clay,<br>Tullymacnous                  | Crannog   |
| DOW 024:029 | J52125254  | Corporation (Killyleagh)                           | Rath  |
| DOW 024:033 | J58625447  | Ardquin  | Church, graveyard and cross slab                            |
| DOW 024:035 | J54745384  | Dunynneill Islands                                 | Raised rath   |
| DOW 024:038 | J57725659  | Round Island                                       | Structural complex - Possibly boat burial?                  |
| DOW 024:039 | J53685606  | Ringdufferin                                       | Enclosure   |
| DOW 025:004 | J6046 5730 | Ardkeen  | Enclosure   |
| DOW 025:006 | J59415689  | Ardkeen  | Church and graveyard and coffin lids (2):<br>Ardkeen Church |
| DOW 025:013 | J61695505  | Dunevly  | Counterscarp rath   |
| DOW 025:018 | J63725517  | Slanes   | Church, graveyard, cross slab and souterrain                |
| DOW 025:027 | J61455385  | Ballyfinragh                                       | Aerial photo: circular feature                              |
| DOW 026:001 | J06775096  | Ballynagarrick                                     | Rath  |
| DOW 026:002 | J05194790  | Loughans   | Enclosure: Loughan's Mound                                  |
| DOW 027:008 | J13525016  | Tonaghmore   | Crannog   |
| DOW 027:010 | J12974906  | Tonaghmore   | Enclosure   |
| DOW 027:013 | J14555012  | Tonaghmore   | Rath  |
| DOW 027:051 | J16654753  | Magherally – built 1770,<br>oldest gravestone 1697 | Church (listed) and graveyard                               |
| DOW 027:076 | J13354733  | Ballymoney, Banbridge                              | Enclosure   |
| DOW 027:087 | J13854601  | Tullylear, Banbridge                               | Enclosure - mass fort, Lisnaree                             |

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| DOW 027:088 | J13464596 | Ballyvally, Tullylear,<br>Banbridge | Enclosure   |
| DOW 027:096 | J18264987 | Lisaward                            | Enclosure   |
| DOW 027:105 | J16794541 | Tullyrain                           | Enclosure   |
| DOW 028:008 | J21265057 | Drumaghadone                        | Rath  |
| DOW 028:009 | J21074998 | Skeagh                              | Bivallate rath                                      |
| DOW 028:015 | J22075122 | Ballysallagh                        | Rath  |
| DOW 028:022 | J25074899 | Aughnaskeagh                        | Enclosure?  |
| DOW 028:025 | J27044965 | Ardtanagh                           | Enclosure   |
| DOW 028:065 | J22144896 | Garvagh                             | Aerial photo site                                   |
| DOW 028:069 | J23905060 | Skeagh                              | Rath  |
| DOW 029:006 | J35975177 | Ballymaglave North                  | Rath  |
| DOW 029:014 | J31554988 | Crossgar                            | Enclosure   |
| DOW 029:023 | J30994794 | Drin                                | Enclosure   |
| DOW 029:032 | J37124933 | Ballymaglave South                  | Enclosure   |
| DOW 029:041 | J38654714 | Drumaness                           | Enclosure   |
| DOW 030:017 | J45054799 | Annacloy                            | Castle  |
| DOW 030:037 | J47104624 | Ballyrenan                          | Aerial photo: rath                                  |
| DOW 031:003 | J54064788 | Raholp                              | Church  |
| DOW 031:005 | J57404985 | Castleward                          | Tower-house: Old Castle Ward                        |
| DOW 031:008 | J54514982 | Walshestown                         | Tower-house, bawn                                   |
| DOW 031:009 | J49634701 | Quoile                              | Tower-house: Quoile Castle                          |
| DOW 031:013 | J56085040 | Audleystown                         | Holy well: Toberdoney, Sunday Well                  |
| DOW 031:015 | J56615037 | Audleystown                         | Round cairn and cist                                |
| DOW 031:022 | J55084699 | Castlemahon                         | Stone circle, pit and cist with cremation<br>burial |
| DOW 031:023 | J50705178 | Tullykin                            | Enclosure   |
| DOW 031:032 | J49194866 | Ballygally                          | Platform rath: Cowbridge Fort                       |
| DOW 031:033 | J50114849 | Ballygally                          | Enclosure   |
| DOW 032:002 | J58905002 | Strangford Lower,<br>Strangford     | Tower: Old Court                                    |
| DOW 032:005 | J61215235 | Derry                               | Two Early Christian churches:<br>Churches Of Dere   |
| DOW 032:013 | J61104721 | Ballyedock Or Carrstown             | Raised Rath   |
| DOW 032:028 | J63755270 | Newcastle                           | Aerial photo: enclosure                             |
| DOW 032:030 | J62375071 | Tullynacrew                         | Aerial photo: hillfort?                             |
| DOW 032:032 | J62684931 | Keentagh                            | Aerial photo: cropmarks                             |
| DOW 033:007 | J08124410 | Lisnagade                           | Rath  |
| DOW 033:008 | J08334426 | Lisnagade                           | Rath: Lisnaweelan                                   |
| DOW 033:023 | J07704172 | Lisnabrague                         | Enclosure   |
| DOW 033:036 | J06853940 | Killysavan                          | Linear earthwork: The Danes Cast (part of)          |
| DOW 034:001 | J10394468 | Ballygowan                          | Rath  |
| DOW 034:002 | J11534424 | Ballyvally, Banbridge               | Raised rath: Rough Fort                             |
| DOW 034:025 | J10534336 | Coolnacran                          | Counterscarp rath                                   |
| DOW 034:052 | J19663937 | Ballybrick                          | Rath  |
| DOW 034:058 | J16564014 | Ballynafoy                          | Enclosure - rath?                                   |
| DOW 034:059 | J16564067 | Ballynafoy                          | Enclosure -rath?                                    |
| DOW 034:085 | J15894171 | Ballynanny                          | Souterrain  |
| DOW 034:089 | J19563974 | Ballysheil                          | Enclosure - rath?                                   |
| DOW 034:093 | J11573884 | Ballintaggart                       | Standing stone                                      |
| DOW 034:097 | J16464017 | Ballynafoy                          | Aerial photo site                                   |
| DOW 034:109 | J16034038 | Ballynafoy                          | Aerial photo: cropmark                              |
| DOW 034:122 | J10704075 | Ballintaggart                       | Aerial photo: circular cropmark                     |
| DOW 034:125 | J15924485 | Balleevy                            | Standing Stone                                      |



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|-------------|-----------|---------------------------------|---|
| DOW 035:015 | J28144112 | Derryneill                      | Rath  |
| DOW 035:023 | J26003978 | Moneyslane                      | Two conjoined earthworks                                      |
| DOW 035:028 | J22224088 | Shannaghan                      | Rath  |
| DOW 035:031 | J21623948 | Ballyroney                      | Motte and two baileys: Ballyroney Mound                       |
| DOW 035:032 | J22053880 | Seafin                          | Castle and rath reused as bailey:<br>Seafin Castle; mag       |
| DOW 035:038 | J29614460 | Legananny                       | Round cairn   |
| DOW 035:039 | J23884119 | Cloghskelet                     | Bronze Age cemetery   |
| DOW 036:006 | J35464372 | Dunturk                         | Rath  |
| DOW 036:020 | J37304265 | Drumaroad                       | Rath  |
| DOW 036:030 | J35583924 | Ballylough                      | Platform rath   |
| DOW 036:038 | J36504086 | Drumanaquoile                   | Aerial photo: cropmark  |
| DOW 036:043 | J32813965 | Backaderry                      | Souterrain  |
| DOW 037:005 | J47704545 | Inch                            | Cistercian abbey and precinct with<br>graveyard and enclosure |
| DOW 037:010 | J41574257 | Dunnew                          | Counterscarp rath   |
| DOW 037:017 | J44304333 | Magheralagan                    | Crannog   |
| DOW 037:019 | J45604323 | Hollymount                      | Enclosure - tree ring?  |
| DOW 037:024 | J47944346 | Demesne Of Down,<br>Downpatrick | Standing stone  |
| DOW 037:033 | J47564180 | Quarter Cormick                 | Rath: Plunket's Fort  |
| DOW 037:039 | J46564001 | Castleskreen                    | Rath and tower-house: Castleskreen<br>Tower House             |
| DOW 037:044 | J46144103 | Bonecastle                      | Counterscarp rath   |
| DOW 037:056 | J43514031 | Ballykeel                       | Raised rath   |
| DOW 037:070 | J48844057 | Ballynoe                        | Standing stone  |
| DOW 037:079 | J46584512 | Inch                            | Aerial photo: cropmarks                                       |
| DOW 037:081 | J45144255 | Ballydonety                     | Aerial photo: cropmark  |
| DOW 037:082 | J44474331 | Magheralagan                    | Aerial photo: cropmark  |
| DOW 037:098 | J44094273 | Tannaghmore                     | Holy well: Toberdoney   |
| DOW 037:100 | J483446   | Demesne Of Down,<br>Downpatrick | Augustinian priory: Monasterium<br>Hibernicorum, Mona         |
| DOW 037:107 | J487447   | Demesne Of Down,<br>Downpatrick | Fortifications: McCrory's Castle                              |
| DOW 037:108 | J4844     | Demesne Of Down,<br>Downpatrick | Fortifications: Castle Derras                                 |
| DOW 037:110 | J48824435 | Demesne Of Down,<br>Downpatrick | Castle  |
| DOW 037:112 | J47984033 | Demesne Of Down,<br>Downpatrick | Standing stone  |
| DOW 038:015 | J52954535 | Slievenagriddle                 | Portal tomb or cist burial                                    |
| DOW 038:033 | J58184566 | Glebe                           | Hospital (site of): St Peter's Leper<br>Hospital; sp          |
| DOW 038:039 | J52634577 | Ballystokes                     | Cup-and-ring-marked stone                                     |
| DOW 038:046 | J51044395 | Struell                         | Round cairn   |
| DOW 038:049 | J58514325 | Ballywoodan                     | Aerial photo: oval enclosure                                  |
| DOW 038:051 | J58074566 | Glebe                           | Possible site of church and graveyard                         |
| DOW 038:061 | J55974209 | Bishops Court                   | Cist?   |
| DOW 038:069 | J51964109 | Ballyclander Upper              | Possible souterrain   |
| DOW 040:024 | J07893444 | Ballylough                      | Enclosure   |
| DOW 040:032 | J10163396 | Lisserboy                       | Graveyard: Traymount  |
| DOW 040:036 | J09673220 | Corgary                         | Standing stone  |
| DOW 040:043 | J10373543 | Glebe                           | Aerial photo: cropmark  |
| DOW 041:027 | J19543635 | Aughnavallog                    | Enclosure   |

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| DOW 041:043 | J14643551   | Ouley                  | Enclosure  |
| DOW 041:052 | J18943299   | Kiltarriff             | Enclosure  |
| DOW 041:056 | J17513334   | Barnmeen               | Enclosure  |
| DOW 041:075 | J18163440   | Tullyquilly            | Enclosure  |
| DOW 041:088 | J 171 330   | Barnmeen               | Souterrain and well  |
| DOW 042:001 | J20353870   | Ballybrick             | Enclosure  |
| DOW 042:003 | J20433840   | Lisnavaghrog           | Platform rath (one of a pair with 042:002)                 |
| DOW 042:004 | J20923780   | Lisnavaghrog           | Enclosure  |
| DOW 042:014 | J21233482   | Tirfergus              | Rath   |
| DOW 042:022 | J25043425   | Cabragh                | Platform rath  |
| DOW 042:028 | J26393395   | Islandmoyle            | Enclosure  |
| DOW 042:034 | J28163463   | Ballymoney             | Rath   |
| DOW 042:035 | J28053405   | Ballymoney             | Counterscarp rath  |
| DOW 042:038 | J28103278   | Fofannyreagh           | Mound - possibly raised rath                               |
| DOW 042:043 | J28873423   | Ballymoney             | Crannog? In Lough Island Reavy                             |
| DOW 042:071 | J27463831   | Ballyward              | Standing stone (destroyed)                                 |
| DOW 043:004 | J31043871   | Ballymaginaghy         | Platform rath and souterrain                               |
| DOW 043:009 | J36723919   | Aghlisnafin            | Cashel   |
| DOW 043:016 | J34453809   | Clarkill               | Oval cashel  |
| DOW 043:022 | J38233824   | Magherasaul            | Landscape feature - tree plantation                        |
| DOW 043:041 | J33243639   | Castlewellan           | Enclosure  |
| DOW 043:049 | J36273563   | Ballyginny             | Souterrain and rath?                                       |
| DOW 043:063 | J31123407   | Drumena                | Cashel with souterrain and house sites:<br>Walsh's Fort    |
| DOW 043:070 | J32053416   | Moneyscalp             | Enclosure - cashel?  |
| DOW 043:087 | J37203310   | Carnacavill, Newcastle | Enclosure (destroyed)                                      |
| DOW 043:090 | J33153684   | Clarkill               | Inscribed stone, dated 1675                                |
| DOW 043:091 | J39363432   | Wateresk               | Souterrain and rath?                                       |
| DOW 043:096 | J 3911 3423 | Ballyloughlin          | Standing stones (2)  |
| DOW 043:098 | J37903454   | Ballyginny             | Bullaun  |
| DOW 043:102 | J35453891   | Ballylough             | Aerial photo: large circular enclosure                     |
| DOW 043:108 | J31893662   | Castlewellan           | Stone structure  |
| DOW 044:011 | J46673800   | Ballyplunt             | Raised rath  |
| DOW 044:012 | J48113837   | Ballylucas             | Mound - rath?  |
| DOW 044:013 | J45163659   | Glovet                 | Raised rath  |
| DOW 044:014 | J45833679   | Glovet                 | Rath and souterrain  |
| DOW 044:032 | J44473787   | Tyrella North          | Souterrain   |
| DOW 044:040 | J40353707   | Dundrum                | Souterrain   |
| DOW 044:044 | J41523906   | Ardilea                | Aerial photo: circular cropmark                            |
| DOW 045:001 | J50663822   | Bright                 | Tower-House  |
| DOW 045:012 | J51753477   | Rossglass              | Church (site of): St Bridget's                             |
| DOW 045:013 | J52803386   | Saint John's Point     | Church and graveyard, site of monastery<br>with bullaun    |
| DOW 045:015 | J53093542   | Kilbride               | Church and graveyard (site of), with<br>cross-carved stone |
| DOW 045:021 | J56153710   | Ardglass               | Tower-house, merchants stores and<br>C18th castle          |
| DOW 046:001 | J10173195   | Corcreeghy             | Two conjoined raths  |
| DOW 046:006 | J08323017   | Lisduff                | Enclosure  |
| DOW 046:039 | J09022664   | Newry                  | Post-Medieval church and graveyard:<br>St Patrick's        |
| DOW 046:045 | J07353155   | Drummiller             | Standing stone? (possibly Modern)                          |
| DOW 047:002 | J11153061   | Turmore                | Rath   |
| DOW 047:019 | J18353160   | Barnmeen               | Bivallate rath   |

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| DOW 047:037 | J14292970 | Croan                           | Enclosure  |
| DOW 047:041 | J15613006 | Cullion                         | Rath   |
| DOW 047:043 | J17492963 | Tamary                          | Cairn  |
| DOW 047:063 | J12942777 | Benagh                          | Enclosure  |
| DOW 047:072 | J13632629 | Benagh                          | Enclosure  |
| DOW 047:074 | J14282700 | Edenmore                        | Possible cashel: Lisbane                             |
| DOW 047:081 | J14982641 | Edenmore                        | Standing stones (removed) and enclosure              |
| DOW 047:085 | J16042662 | Mayo                            | Standing stone: Long Stone                           |
| DOW 048:003 | J25893210 | Kinghill                        | Rath   |
| DOW 048:010 | J23743143 | Ballyweely                      | Rath   |
| DOW 048:020 | J20722939 | Ballygorian Beg                 | Enclosure  |
| DOW 048:034 | J27282634 | Stang                           | Possible cairn: Deers Meadow                         |
| DOW 048:040 | J26993248 | Fofannybane                     | Cooking place/ Fulacht Fiadh                         |
| DOW 048:041 | J21172821 | Carcullion                      | Rath   |
| DOW 049:020 | J376300   | Murlough Upper, Newcastle       | Historic settlement: Newcastle                       |
| DOW 051:017 | J15782527 | Mayo                            | Rath   |
| DOW 051:018 | J16252524 | Mayo                            | Standing stone                                       |
| DOW 051:025 | J13662317 | Carrickmacstay                  | Enclosure  |
| DOW 051:032 | J15142272 | Aghavilly                       | Cashel and souterrain                                |
| DOW 051:059 | J15422444 | Tamnaharry                      | Possible Megalithic tomb and enclosure:<br>Cloghadda |
| DOW 051:061 | J15141959 | Clonallan Glebe,<br>Warrenpoint | Multiperiod church and graveyard:<br>Clondalan       |
| DOW 051:074 | J12732387 | Carrogs                         | Standing stone?                                      |
| DOW 052:006 | J28352125 | Attical                         | Aerial photo site: circular enclosure                |
| DOW 054:001 | J12911923 | Narrow Water                    | Motte  |
| DOW 054:008 | J16571913 | Drumsesk                        | Rath   |
| DOW 054:021 | J20121764 | Rosstrevor                      | Round cairn  |
| DOW 054:024 | J19191582 | Ballinran                       | Mesolithic shell midden                              |
| DOW 055:007 | J22661589 | Ballintur Upper                 | Rath   |
| DOW 055:015 | J29721730 | Leitrim                         | Enclosure  |
| DOW 055:022 | J28181599 | Ballyrogan Or Mourne Park       | Court tomb: Giant's Grave                            |
| DOW 055:041 | J27131427 | Drummanmore                     | Rath   |
| DOW 055:053 | J25241488 | Ballymadeerfy                   | Enclosure?   |
| DOW 057:003 | J24731184 | Greencastle                     | Castle and well: Greencastle                         |
| FER 134:001 | H12866832 | Drumlongfield                   | Enclosure  |
| FER 134:004 | H14686979 | Greaghmore                      | Rectangular enclosure                                |
| FER 134:006 | H14306895 | Procklis                        | Rath   |
| FER 135:011 | H20956720 | Drummacahan                     | Tree ring  |
| FER 135:013 | H22686723 | Crimlin                         | Platform rath  |
| FER 135:018 | H16977117 | Mullanmeen Upper                | Rath   |
| FER 135:024 | H21376777 | Drumbaran                       | Aerial photo: circular cropmark                      |
| FER 135:031 | H19996996 | Tievenavarnog                   | Caves/tunnels?                                       |
| FER 152:003 | H06956230 | Dreenan                         | Round cairn  |
| FER 153:011 | H09246265 | Mullans                         | Landscaping feature                                  |
| FER 153:014 | H09826283 | Mullans                         | Tree ring  |
| FER 153:023 | H088619   | Round Island                    | Prehistoric settlement site                          |
| FER 153:036 | H15706177 | Gubbaroe                        | Aerial photo: circular cropmark                      |
| FER 153:038 | H16566259 | Crevinish                       | Church (site of) and graveyard:<br>Crevinish Castle  |
| FER 153:039 | H13976449 | Portinode                       | Lime kiln  |
| FER 154:013 | H22516597 | Monavreece                      | Mound: motte   |
| FER 154:019 | H24556513 | Diviny                          | Bivallate rath                                       |
| FER 154:021 | H25666569 | Kilsmullan                      | Rath   |

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| FER 154:023 | H17826416 | Letterkeen            | Rath - one of a pair with 154:022         |
| FER 154:027 | H18976424 | Drumnarullagh         | Enclosure                                 |
| FER 154:037 | H24726480 | Drumsawna More        | Rath                                      |
| FER 154:039 | H19126368 | Mantlin               | Rath - one of a pair with 154:040         |
| FER 154:059 | H18786097 | Drummoyagh            | Platform rath                             |
| FER 154:079 | H24836542 | Kilsmullan            | Stone structure                           |
| FER 154:087 | H17466245 | Lisingle              | Aerial photo: circular cropmark           |
| FER 155:003 | H27216295 | Sheemuldoon           | Possible Megalithic tomb: Giant's Grave   |
| FER 170:014 | G92305711 | Fassagh               | Platform rath                             |
| FER 170:022 | G93165674 | Fassagh               | Aerial photo: circular cropmark           |
| FER 170:030 | G96425578 | Gortnalee             | Aerial photo: circular cropmark           |
| FER 170:032 | G91215512 | Drumnasreane          | Aerial photo: two concentric cropmarks    |
| FER 171:016 | H01495863 | Rossmore              | Round cairn: Black Fort                   |
| FER 171:021 | H03575733 | Sruhanure             | Rath                                      |
| FER 171:025 | H00915701 | Ardees Upper          | Rath                                      |
| FER 171:026 | H00745965 | Dulrush               | Rath                                      |
| FER 171:029 | H05405472 | Braade                | Sweat house                               |
| FER 171:034 | G98135874 | Magheramenagh         | Aerial photo: rectangular cropmark        |
| FER 171:037 | G98325752 | Drumataffan           | Aerial photo: oval cropmark               |
| FER 171:040 | H03645824 | Drumcrow West         | Aerial photo: two concentric cropmarks    |
| FER 172:012 | H09755588 | Bohevny               | Rath                                      |
| FER 172:014 | H10135571 | Lenaghan              | Rath                                      |
| FER 172:036 | H09885528 | Lenaghan              | Crannog                                   |
| FER 173:009 | H234603   | Drumbulcan            | Rath                                      |
| FER 173:018 | H20685923 | Drumadray             | Landscaping feature                       |
| FER 173:019 | H21235944 | Coolaness             | Enclosure                                 |
| FER 173:021 | H22905863 | Tullynagarn           | Rath                                      |
| FER 173:029 | H19935749 | Drumhoney             | Rath                                      |
| FER 173:036 | H23025779 | Castle Irvine Demesne | Enclosure: Dromore                        |
| FER 173:046 | H21005606 | Drumbo                | Rath                                      |
| FER 173:050 | H22355443 | Druminshin Beg        | Platform rath                             |
| FER 173:062 | H18345918 | Ballymacataggart      | Rath                                      |
| FER 173:084 | H18055818 | Rossachrin            | Aerial photo: Small circular cropmark     |
| FER 173:089 | H20945783 | Liscreevin            | Aerial photo: large circular cropmark     |
| FER 190:003 | G98235416 | Killy Beg             | Wedge tomb: Giant's Grave                 |
| FER 190:012 | H01754948 | Dog Big               | Court tomb: Carrigeenbrack                |
| FER 190:018 | H06915053 | Rossinure Beg         | Court tomb: Giant's Grave                 |
| FER 191:011 | H13865398 | Rahalton              | Rath                                      |
| FER 191:019 | H08375225 | Stratonagher          | Mound                                     |
| FER 191:039 | H08135045 | Knock Beg             | Enclosure                                 |
| FER 191:061 | H16474937 | Castletown Monea      | C17th castle and bawn: Monea Castle       |
| FER 191:065 | H14614818 | Drumscollop           | Platform rath                             |
| FER 191:067 | H16064859 | Monea                 | Rath                                      |
| FER 191:085 | H15044877 | Tullycreevy           | Dry-stone structure, possibly sweat house |
| FER 191:095 | H14935316 | Cosbystown            | Rath                                      |
| FER 192:002 | H23744978 | Urbal Or Mossfeild    | Rath: Mossfield Fort                      |
| FER 192:007 | H22835428 | Coolgarran            | Megalithic tomb?                          |
| FER 192:029 | H20784883 | Ross Outer            | Landscaping feature: Circle Hill          |
| FER 192:031 | H23104989 | Cloghbally            | Holy well                                 |
| FER 192:035 | H17134863 | Keelaghan             | Rath                                      |
| FER 192:042 | H26275187 | Ferney                | Standing stone                            |
| FER 192:043 | H214522   | Rossfad               | Landscape feature                         |
| FER 193:019 | H31455041 | Ballyreagh            | Dual court tomb: Giant's Graves           |
| FER 193:023 | H27754854 | Ballydoolagh          | Enclosure                                 |

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| FER 193:033 | H34725130 | Glen             | Megalithic tomb?                         |
| FER 193:039 | H28235171 | Drumsloe         | Crannog in Drumsloe Lough                |
| FER 193:051 | H30035089 | Killee           | Cairn                                    |
| FER 193:077 | H33505007 | Carn             | Possible Megalithic tomb                 |
| FER 193:079 | H30114830 | Ballyreagh       | Pair of standing stones                  |
| FER 194:009 | H38084857 | Leam             | Rath                                     |
| FER 194:015 | H412480   | Tullyweel        | Castle: Tullyweel House                  |
| FER 194:022 | H42395084 | Mullaghsillogagh | Enclosure                                |
| FER 194:040 | H38195262 | Tonyglaskan      | Two cists, possibly cist cemetery        |
| FER 208:002 | G96774645 | Frevagh          | Cross-shaft and base: Kilcoo             |
| FER 209:004 | H06144613 | Clogherbog       | Inscribed cave                           |
| FER 209:013 | H01304693 | Tullygerravra    | Sweat house                              |
| FER 209:015 | H05134248 | Meenawargy       | Cairns                                   |
| FER 209:022 | G99314621 | Agho             | Aerial photo: enclosure?                 |
| FER 210:017 | H16144636 | Dromore          | Landscaping feature                      |
| FER 210:024 | H16444513 | Kilmore          | Platform rath                            |
| FER 210:025 | H12174457 | Legnagay More    | Platform rath                            |
| FER 210:028 | H12574431 | Carn             | Landscaping feature                      |
| FER 210:031 | H12374415 | Legnagay More    | Standing stone                           |
| FER 210:056 | H10714234 | Dooletter        | Holy well?                               |
| FER 210:057 | H10854357 | Aghanaglack      | Cave adapted for use as souterrain       |
| FER 210:082 | H13784677 | Carr             | Mesolithic occupation site               |
| FER 211:006 | H18844643 | Kilnaloo         | Rath                                     |
| FER 211:015 | H21004536 | Kinarla          | Rath                                     |
| FER 211:018 | H21214473 | Drumskew         | Rath                                     |
| FER 211:045 | H25414275 | Gortgonnell      | Bullaun?                                 |
| FER 211:069 | H25734426 | Agharainy        | Platform rath                            |
| FER 212:002 | H27554698 | Lissan           | Long cairn                               |
| FER 212:010 | H32594655 | Ratoran          | Stone alignment                          |
| FER 212:012 | H33704653 | Pubble           | Standing stone?: Gray Stone              |
| FER 212:029 | H31404545 | Killee           | Stone circle                             |
| FER 212:030 | H31554548 | Killee           | Stone circle                             |
| FER 212:035 | H34074490 | Drumderg         | Rath                                     |
| FER 212:046 | H28734170 | Ballintarsan     | Enclosure                                |
| FER 212:047 | H31144433 | Cloghtogle       | Round cairn                              |
| FER 212:075 | H26814368 | Carrowmacmea     | Rath and tree plantation                 |
| FER 212:078 | H31714417 | Cloghtogle       | Rath                                     |
| FER 212:149 | H30604388 | Coolbuck         | Burnt mound                              |
| FER 213:004 | H41304609 | Rafintan         | Enclosure                                |
| FER 213:017 | H36374306 | Foydragh         | Tree ring                                |
| FER 213:041 | H42684627 | Tattynuckle      | Enclosure                                |
| FER 213:052 | H43234196 | Derrycullion     | Enclosure                                |
| FER 213:054 | H40774303 | Derryloman       | Landscaping feature: Tullydahy           |
| FER 213:056 | H43004725 | Cran             | Landscaping feature                      |
| FER 213:064 | H40324640 | Cavans           | Church and graveyard (site of)           |
| FER 213:069 | H41704640 | Ramult           | Enclosure                                |
| FER 213:071 | H41834331 | Claraghy         | Enclosure?                               |
| FER 214:002 | H46544542 | Longfield        | Court tomb                               |
| FER 214:007 | H47554332 | Crocknagrally    | Megalithic tomb?: Giant's Stones         |
| FER 214:011 | H47234254 | Altagoaghan      | Standing stone: The Grey Stone (removed) |
| FER 214:014 | H46074582 | Agheeghter       | Long cairn                               |
| FER 227:004 | H05624040 | Drumelly         | Cashel                                   |
| FER 227:013 | H04094021 | Corralea         | Enclosure                                |
| FER 227:017 | H06103950 | Kilrooskagh      | Stone enclosure - cashel? Or sheepfold?  |

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| FER 227:018 | H04294091 | Mullan                            | Sweat house  |
| FER 227:019 | H05644005 | Drumelly                          | Bullaun  |
| FER 228:007 | H08464073 | Killycreen East                   | Megalithic tomb: Giant's Grave                                     |
| FER 228:009 | H10724086 | Carrickmacflaherty,<br>Drumman    | Court tomb: Giant's Grave  |
| FER 228:011 | H11833998 | Tonardrum, Cavantreeduff          | Rath   |
| FER 228:013 | H13824058 | Carrickmacsparrow                 | Court tomb: Giant's Grave  |
| FER 228:020 | H07653958 | Cavancarragh                      | Penitential station stone  |
| FER 228:036 | H12033870 | Drumawillin                       | Round cairn  |
| FER 228:053 | H10683631 | Clyhannagh                        | Cashel   |
| FER 228:076 | H08763876 | Belcoo East                       | Crannog  |
| FER 228:077 | H07383922 | Lough Macnean Upper               | Crannog  |
| FER 228:081 | H11413705 | Lough Macnean Lower/<br>Gortatole | Crannog  |
| FER 228:085 | H15633953 | Derrynim                          | Aerial photo: cropmark   |
| FER 228:094 | H10913588 | Knocknalaffina                    | Stone Enclosure and Possible House<br>Foundations                  |
| FER 229:006 | H24404115 | Inishkeen                         | Enclosure - tree ring? Or platform rath?                           |
| FER 229:014 | H21683822 | Mullymesker                       | Landscape feature  |
| FER 229:020 | H23553700 | Drumane                           | Platform rath  |
| FER 229:023 | H22153642 | Clontymullan                      | Enclosure  |
| FER 229:033 | H21713861 | Mullymesker                       | Landscaping feature  |
| FER 229:040 | H21523929 | Granshagh Little                  | Landscaping feature  |
| FER 229:041 | H26194111 | Derrybeg, Derryvore,<br>Drumcrin  | Crannog In Lough Acrussel  |
| FER 229:048 | H22083958 | Rushin, Laragh                    | Island, possibly crannog   |
| FER 230:018 | H31013994 | Drumad                            | Island, possibly crannog   |
| FER 230:023 | H33314077 | Kilmore North                     | Rath   |
| FER 230:026 | H35794082 | Drumadagarve                      | Platform rath  |
| FER 230:033 | H30233844 | Farnamullan                       | Platform rath  |
| FER 230:039 | H33793883 | Corfannan                         | Enclosure  |
| FER 230:040 | H33903901 | Corfannan                         | Platform rath  |
| FER 230:044 | H26703658 | Drumcramph                        | Counterscarp rath  |
| FER 230:050 | H29003634 | Drummee                           | Earthwork  |
| FER 230:055 | H30353609 | Derryhowlaght East                | Rath   |
| FER 230:061 | H32283714 | Clay                              | Rath   |
| FER 230:062 | H32793624 | Drummack                          | Platform rath  |
| FER 230:081 | H27474026 | Derryvullan                       | Holy well: St Patrick's Well                                       |
| FER 230:082 | H27093607 | Aughey                            | Crannog  |
| FER 230:091 | H30033636 | Derryhowlaght East                | Crannog  |
| FER 230:097 | H28943553 | Belleisle                         | Site of plantation castle: house and bawn<br>(now Belleisle House) |
| FER 230:116 | H26753800 | Knock Island                      | Square enclosure   |
| FER 230:117 | H27603762 | Arda                              | Folklore site : St Patrick's Stones                                |
| FER 231:004 | H37954074 | Drumee                            | Rath   |
| FER 231:006 | H387410   | Aghalun                           | Castle: Aghalun Castle   |
| FER 231:010 | H40834122 | Knockmacmanus                     | Rath   |
| FER 231:013 | H43344147 | Carrickpolin                      | Rath   |
| FER 231:017 | H37723866 | Stranafeley                       | Enclosure: Mill Hill   |
| FER 231:020 | H386387   | Deer Park                         | Castle   |
| FER 231:022 | H39403909 | Deer Park                         | Rath   |
| FER 231:030 | H37523563 | Slush Hill                        | Platform rath  |
| FER 232:006 | H52523804 | Corragunt                         | Sweat House  |
| FER 243:002 | H09113409 | Kilnameel                         | Cairn?: Laghtadamel  |

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| FER 243:022 | H16623158 | Aghatirourke                       | Round cairn: Giant's Grave                                  |
| FER 243:032 | H11443442 | Crossmurrin                        | House platforms and field system                            |
| FER 244:011 | H18483112 | Doohatty Glebe                     | Court tomb: Giant's Grave or The Star Cairn                 |
| FER 244:026 | H26342926 | Tonywall                           | Rath  |
| FER 245:001 | H26693466 | Sessiagh East                      | Rath  |
| FER 245:002 | H27273428 | Sessiagh East                      | Rath  |
| FER 245:008 | H34773521 | Drumbrughas North                  | Rath  |
| FER 245:017 | H34643277 | Derrychulla                        | Platform rath   |
| FER 245:030 | H32513322 | Kinmore                            | Crannog In Lough Digh                                       |
| FER 246:015 | H36273313 | Castle Balfour Demesne             | Bivallate rath and ?Souterrain: Lisdoo                      |
| FER 246:027 | H374311   | Manor Water House                  | Plantation house and bawn and later house: Manor Waterhouse |
| FER 246:033 | H39822990 | Donagh                             | Multiperiod church and graveyard: Donaghmoyline             |
| FER 246:041 | H44523085 | Dernaglug And Drumaa               | Crannog In Mount Seborough Lough                            |
| FER 246:046 | H42483013 | Cloghagaddy                        | Rath  |
| FER 246:056 | H36823159 | Aghamore South                     | Tree ring   |
| FER 246:065 | H36253365 | Lisnaskea                          | Ecclesiastical site   |
| FER 247:005 | H53333077 | Rathkeevan                         | Rath: Rathkeevan  |
| FER 247:011 | H48922950 | Lisrace                            | Platform rath   |
| FER 247:016 | H50363194 | Tattintonegan                      | Platform rath   |
| FER 247:022 | H45832993 | Rossbrick Glebe                    | Island, possibly crannog                                    |
| FER 259:007 | H23302672 | Stramatt                           | Holy Well: Tobernafian                                      |
| FER 260:004 | H28352848 | Coragh                             | Rath  |
| FER 260:011 | H35882857 | Derrylea                           | Rath  |
| FER 260:014 | H30252625 | Dresternan                         | Landscape feature   |
| FER 260:020 | H27922377 | Aghintra                           | Enclosure   |
| FER 260:025 | H33722572 | Reilly                             | Holy well   |
| FER 260:028 | H35922783 | Derrylea                           | Island, possibly crannog                                    |
| FER 260:064 | H31282678 | Corraclare Litte                   | Burnt mound   |
| FER 261:030 | H38692369 | Kevenagh                           | Rath  |
| FER 261:034 | H45472502 | Loughkillygreen                    | Island, possibly crannog                                    |
| FER 261:036 | H40922484 | Cornabass                          | Island, possibly crannog                                    |
| FER 261:038 | H39982607 | Derrygennedy                       | Rath  |
| FER 262:001 | H45632837 | Carneyhome                         | Rath  |
| FER 262:017 | H47002243 | Cloncloghy, Tievegarrow, Sheepwalk | Enclosure   |
| FER 271:009 | H29472197 | Kiltycrose                         | Crannog   |
| FER 272:002 | H42802232 | Kiltober                           | Mound, possibly church and penal site: Toberakill           |
| FER 273:001 | H47231960 | Lisnadurk Glebe North              | Crannog In Drumnaveale Lough                                |
| LDY 001:003 | C65993513 | Oughtymore                         | Burial  |
| LDY 001:004 | C66003524 | Ballymulholland                    | Early Christian shell midden                                |
| LDY 001:006 | C68553610 | Doaghs Upper Middle                | Standing Stone  |
| LDY 002:002 | C70843447 | Craig                              | Church and graveyard (site of): Skreen Church               |
| LDY 002:010 | C78093441 | Exorna                             | Souterrain  |
| LDY 003:004 | C82423662 | Crossreagh East, Portstewart       | Standing stone  |
| LDY 003:013 | C87053870 | Glebe                              | Church and graveyard: Ballywillin                           |
| LDY 003:014 | C86143548 | Dundooan                           | Rath  |
| LDY 003:035 | C82543760 | Crossreagh East, Portstewart       | Aerial photo: circular cropmark                             |
| LDY 003:049 | C84303830 | Craigtown More                     | Rath and souterrain (O.S. Memoir Site)                      |

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| LDY 003:072 | C82543732 | South Mullaghcall     | Standing stone                                 |
| LDY 003:073 | C85073842 | Carnalridge           | Cairn  |
| LDY 003:075 | C84663607 | Island Vardin         | Souterrain (O.S. Memoir Site)                  |
| LDY 004:005 | C89863533 | Ballyversall          | Aerial photo: circular cropmark                |
| LDY 005:006 | C68443232 | Duncrun               | Domnach Airthir Ardda Rath                     |
| LDY 006:010 | C75513199 | Altikeeragh           | Rath   |
| LDY 006:013 | C75233270 | Ballyhacket Toberclaw | Rath   |
| LDY 006:017 | C73412928 | Largantea             | Round cairn                                    |
| LDY 006:019 | C71303392 | Craig                 | Castle (site of)                               |
| LDY 006:022 | C73392860 | Largantea             | Round cairn                                    |
| LDY 006:034 | C73052892 | Grange Park           | Rectangular foundation                         |
| LDY 006:035 | C74402915 | Largantea             | Round cairn                                    |
| LDY 006:039 | C73382862 | Largantea             | Cairn?   |
| LDY 007:003 | C80303054 | Dunalis Upper         | Souterrain                                     |
| LDY 007:006 | C81323009 | Ballyvennox           | Enclosure                                      |
| LDY 007:014 | C83312941 | Dunderg, Macosquin    | Circular fort                                  |
| LDY 007:026 | C87413192 | Tullan                | Mound  |
| LDY 007:027 | C87562910 | Fish Loughan          | Earthworks                                     |
| LDY 007:032 | C87373306 | Ballyclaber           | Enclosure                                      |
| LDY 007:097 | C84803226 | Churchlands           | Stone structure - possibly crypt or vault      |
| LDY 008:001 | C90832984 | Drumaduan             | Rath   |
| LDY 008:005 | C89253378 | Glebe                 | Church   |
| LDY 008:006 | C88483287 | Island Effrick South  | Mound  |
| LDY 008:009 | C90303014 | Drumaduan             | Mound  |
| LDY 009:004 | C65852230 | Tamlaght              | Enclosure                                      |
| LDY 009:005 | C65852303 | Moneyrannel           | Rath   |
| LDY 009:020 | C67232214 | Newtown/Rathbrady Beg | Bronze-Age urn burial                          |
| LDY 010:002 | C70542360 | Cahery                | Fortification                                  |
| LDY 010:003 | C71052680 | Dirtagh               | Enclosure                                      |
| LDY 010:006 | C72052558 | Carrydoo              | Enclosure                                      |
| LDY 010:009 | C72082278 | Leck                  | Rath - one of a pair with 010:008              |
| LDY 010:028 | C73032311 | Leck                  | Aerial photo: cropmark                         |
| LDY 010:029 | C73152142 | Terrydoo Walker       | Aerial photo: Enclosure                        |
| LDY 010:046 | C69152324 | Fruithill             | Standing stone/burials: Greystone Park         |
| LDY 011:002 | C79762226 | Craigmore             | Possible megalith/ mass rock                   |
| LDY 011:015 | C87492383 | Knockaduff            | Mound burial?                                  |
| LDY 011:021 | C83652448 | Killeague             | Pit grave                                      |
| LDY 011:026 | C86762533 | Coolyvenny            | Souterrain - 'Cave Hill'                       |
| LDY 014:005 | C47661593 | Managh Beg            | Rath (motte and bailey?)                       |
| LDY 014:015 | C46871955 | Templetown            | Church and graveyard: Enagh Or<br>Domnach Dola |
| LDY 014:034 | C43371648 | Londonderry, Derry    | Cathedral                                      |
| LDY 014:035 | C42201976 | Londonderry, Derry    | Linear, connected cellars                      |
| LDY 014:036 | C434186   | Ballymagrorty         | Standing stone                                 |
| LDY 014:040 | C40222043 | Coshquin              | Souterrain                                     |
| LDY 015:001 | C57081511 | Glasakeeran           | Wedge tomb                                     |
| LDY 015:016 | C49701755 | Avish                 | Standing stone                                 |
| LDY 015:026 | C53551995 | Tullanee              | Holy well                                      |
| LDY 015:034 | C54741555 | Clonmakane            | Court tomb                                     |
| LDY 015:036 | C56641652 | Dunladeglebe          | Megalith?                                      |
| LDY 016:006 | C60121998 | Carnamuff             | Enclosure                                      |
| LDY 016:016 | C67721828 | Largy                 | Aerial photo: cropmark                         |
| LDY 017:023 | C73632094 | Terrydoo Walker       | Aerial photo: cropmark                         |
| LDY 017:027 | C70812016 | Ballymully            | Aerial photo: circular cropmark                |



|             |           |                         |   |
|-------------|-----------|-------------------------|---|
| LDY 017:038 | C74301935 | Aghansillagh            | Cashel and field system                               |
| LDY 018:004 | C87681692 | Cullyramer              | Enclosure   |
| LDY 018:007 | C87791524 | Bellury                 | Rath  |
| LDY 018:028 | C84321694 | Mettican Glebe          | Enclosure   |
| LDY 019:008 | C88931655 | Moneydig                | Megalithic cist                                       |
| LDY 019:011 | C91192120 | Landagivey              | Enclosure   |
| LDY 022:004 | C44531293 | Clondermot              | Church and graveyard                                  |
| LDY 022:026 | C41181175 | Ballyore/Gortin         | Cropmarks   |
| LDY 022:028 | C42371252 | Primity/Magheracanon    | Cropmarks   |
| LDY 022:029 | C40481210 | Rosnagalliagh           | Cropmark  |
| LDY 022:032 | C41751201 | Magheracanon            | Holy well   |
| LDY 023:011 | C50171352 | Killennan               | Enclosure/field system                                |
| LDY 023:019 | C51201393 | Mullaboy                | Cross   |
| LDY 023:024 | C58521283 | Pubble                  | Ring barrow   |
| LDY 023:031 | C52440812 | Kilcaltan               | Standing stone  |
| LDY 023:032 | C53181346 | Mullaboy                | Megalith  |
| LDY 023:035 | C53291356 | Ballygroll              | Round cairn   |
| LDY 023:040 | C53401374 | Ballygroll              | Round cairn, part of Ballygroll prehistoric landscape |
| LDY 023:041 | C53271338 | Mullaboy/Ballygroll     | Field system  |
| LDY 023:044 | C54721316 | Slaghtmanus             | Standing stone  |
| LDY 023:049 | C52871328 | Mullaboy                | Hut site?   |
| LDY 024:005 | C67020848 | Derrychrier             | Standing stone  |
| LDY 024:010 | C67831371 | Bovevagh                | Enclosure   |
| LDY 025:002 | C77491243 | Formil                  | Rath  |
| LDY 025:004 | C69420844 | Dungiven                | Standing stone and mound                              |
| LDY 025:008 | C69150865 | Dungiven                | Holy well   |
| LDY 025:010 | C71411139 | Derryduff/Ballymakeever | Enclosure   |
| LDY 026:002 | C87461034 | Lismoyle                | Enclosure   |
| LDY 026:007 | C86241228 | Lisachrin               | Enclosure   |
| LDY 026:021 | C84041242 | Gortacloghan            | Rath and landscaping feature                          |
| LDY 026:025 | C82111245 | Dunnavenney             | Enclosure   |
| LDY 026:026 | C82981246 | Cuilbane                | Enclosure   |
| LDY 026:028 | C83891339 | Tirkeeran               | Rath and landscaping feature                          |
| LDY 026:034 | C84041481 | Ballynameen             | Rath?   |
| LDY 026:044 | C82171318 | Cuilbane                | Rath  |
| LDY 026:049 | C81001253 | Brockaghboy             | Rath  |
| LDY 026:051 | C79051226 | Coolcoscreaghan         | Two cairns  |
| LDY 026:057 | C85271445 | Kurin                   | Enclosure   |
| LDY 026:073 | C83501027 | Tamnyrankin             | Stone alignment                                       |
| LDY 026:083 | C85071248 | Carbalintober           | Aerial photo: cropmark                                |
| LDY 027:006 | C89131172 | Bovedy                  | Soutterain and enclosure?                             |
| LDY 027:012 | C93211031 | Lisnagroa               | Enclosure   |
| LDY 029:003 | C57410212 | Lear                    | Standing stone  |
| LDY 029:047 | C52400654 | Lettermuck              | Enclosure   |
| LDY 030:006 | C59930404 | Straid                  | Standing stone (removed)                              |
| LDY 030:009 | C60360555 | Terrydreen              | Standing stone  |
| LDY 030:022 | C66020557 | Aughlish                | Enclosure   |
| LDY 030:025 | C65980723 | Rallagh                 | Enclosure   |
| LDY 030:027 | C66650572 | Templemoyle             | Rath  |
| LDY 030:038 | C67060586 | Carnabane               | Soutterain  |
| LDY 031:011 | C72430635 | Cluntygeeragh           | Enclosure   |
| LDY 031:015 | C69200826 | Dungiven                | Dungiven Priory                                       |
| LDY 031:016 | C69930823 | Maheraboy               | Pit grave   |

|             |           |                          |                             |
|-------------|-----------|--------------------------|-----------------------------|
| LDY 031:022 | C73300699 | Carn                     | Cairn                       |
| LDY 031:041 | C70910221 | Teeavan                  | Mound                       |
| LDY 032:001 | C87570297 | Culnady                  | Rath                        |
| LDY 032:013 | C86010576 | Beagh (Temporal)         | Rath                        |
| LDY 032:018 | C87400614 | Gorteade                 | Enclosure                   |
| LDY 032:019 | C84970435 | Glebe                    | Enclosure                   |
| LDY 032:021 | C83880406 | Carrowmenagh             | Rath                        |
| LDY 032:022 | C83730505 | Gortinure                | Rath                        |
| LDY 032:028 | C84800451 | Glebe (Swatragh)         | Enclosure                   |
| LDY 032:038 | C82720600 | Slaghtneill              | Mound?                      |
| LDY 032:080 | C82550631 | Slaghtneill              | Standing stone              |
| LDY 033:009 | C93420691 | Moyagoney                | Enclosure                   |
| LDY 033:033 | C97180412 | Glenone                  | Ford                        |
| LDY 035:002 | H75059597 | Drumderg                 | Portal tomb                 |
| LDY 036:002 | H87209847 | Knocknakielt             | Enclosure: Fort Hill        |
| LDY 036:006 | C85500028 | Maghera                  | Old church                  |
| LDY 036:007 | H81279680 | Moneyquiggy              | Platform rath: 'White Fort' |
| LDY 036:032 | H81429843 | Lisnamuck                | Enclosure                   |
| LDY 036:035 | H81739869 | Drumballyhagan           | Circular enclosure          |
| LDY 037:004 | H93939613 | Killyberry Boyd          | Rath                        |
| LDY 037:006 | H93189862 | Ballymacpeake Upper      | Rath                        |
| LDY 037:016 | H89119792 | Ballynacross             | Enclosure                   |
| LDY 037:017 | H89209672 | Lurgangoose              | Enclosure                   |
| LDY 037:023 | H93109867 | Ballymacpeake Upper      | Crannog                     |
| LDY 037:029 | H94599630 | Old Town Downing         | Enclosure                   |
| LDY 037:030 | H93229612 | Drumlamph                | Enclosure                   |
| LDY 037:032 | C91330113 | Dreenan                  | Rath                        |
| LDY 040:008 | H75819545 | Strawmore                | Megalith                    |
| LDY 041:009 | H81839455 | Mormeal                  | Rath                        |
| LDY 041:011 | H80199513 | Gortnaskey               | Enclosure                   |
| LDY 041:012 | H81159422 | Mormeal                  | Enclosure                   |
| LDY 041:024 | H85559449 | Drumsamney               | Enclosure                   |
| LDY 041:025 | H84759262 | Annagh/Moneysterlin      | Crannog                     |
| LDY 041:031 | H83809504 | Killytoney               | Enclosure                   |
| LDY 041:034 | H80659164 | Brackaghlistea           | Enclosure                   |
| LDY 042:014 | H97539463 | Intake                   | Church Site                 |
| LDY 042:016 | H89759079 | Townparks of Magherafelt | Church and graveyard        |
| LDY 042:040 | H95489203 | The Creagh - Otre        | Graveyard: 'Kille Brieda'   |
| LDY 044:001 | H67408790 | Glenviggan               | Stone circle                |
| LDY 045:001 | H78278591 | Mobuy                    | Court tomb                  |
| LDY 045:006 | H78738394 | Clagan                   | Church Site                 |
| LDY 045:010 | H73168817 | Tunnybrick               | Crannog?                    |
| LDY 046:013 | H87548482 | Maghadone                | Rath                        |
| LDY 046:018 | H87398792 | Lisalbanagh              | Enclosure                   |
| LDY 046:036 | H88048454 | Maghadone                | Crannog?                    |
| LDY 047:001 | H89288489 | Ballynenagh              | Enclosure                   |
| LDY 047:003 | H91168497 | Ballyriff                | Rath                        |
| LDY 047:005 | H93968490 | Ballyronan Beg           | Rath                        |
| LDY 047:016 | H93018830 | Ballynagarve             | Landscaping feature         |
| LDY 047:019 | H91678368 | Ballyneill Beg           | Church site?                |
| LDY 047:023 | H91868362 | Ballyneill Beg           | Graveyard                   |
| LDY 047:025 | H93418799 | Drumenagh                | Graveyard                   |
| LDY 048:004 | H88867843 | Tamlaght                 | Standing stone              |
| LDY 048:015 | H85438241 | Crossnarea               | Enclosure                   |

|             |           |                        |   |
|-------------|-----------|------------------------|---|
| LDY 048:021 | H82868092 | Glebe                  | Rath  |
| LDY 048:025 | H83117911 | Lismoney               | Enclosure   |
| LDY 048:030 | H86157962 | Annahavil              | Enclosure   |
| LDY 048:036 | H85777927 | Ballyloughan           | AP Site - circular enclosure  |
| LDY 048:039 | H88817942 | Ballydawley            | Aerial photo: circular enclosure  |
| LDY 049:003 | H93328042 | Ballinderry            | Church (site of) in graveyard   |
| LDY 049:004 | H92188174 | Ballygillen Beg        | Rath  |
| LDY 14A:005 | C47542275 | Culmore                | Enclosure   |
| LDY 14A:006 | C48512138 | Carrakeel              | Crannog   |
| LDY 14A:012 | C46302292 | Ballynagard            | Aerial photo: enclosure   |
| LDY 14A:021 | C45052195 | Ballyarnet             | Mound   |
| LDY 15A:001 | C56062094 | Tullybriland           | Stone cross   |
| TYR 002:005 | C40810444 | Moyagh                 | Enclosure   |
| TYR 002:023 | C42280673 | Gortmellan             | Cairn: Grey Stone   |
| TYR 002:030 | C42350687 | Gortmellan             | Aerial photo: hut platform  |
| TYR 003:002 | C50750389 | Ballyneaner            | Rath  |
| TYR 003:009 | C46420633 | Castlewarren           | Platform rath   |
| TYR 003:013 | C50500219 | Loughash               | Cairn and standing stone: Leabaidh Na Bhfathach Or Leabaidh Na Bpeacadh           |
| TYR 005:004 | C37910105 | Milltown               | Megalithic tomb: Cloghogle  |
| TYR 005:012 | H41559965 | Fyfin                  | Enclosure   |
| TYR 005:019 | H34479774 | West Ward Strabane     | Castle  |
| TYR 006:010 | C43880176 | Drumman                | Rath  |
| TYR 006:020 | H47459954 | Aghafad                | Rath  |
| TYR 006:022 | H49269689 | Doorat                 | Two stone circles and possible alignment  |
| TYR 006:031 | C47200056 | Lisnaragh Irish        | Cairn   |
| TYR 006:040 | H495968   | Doorat                 | Field wall and seven standing stones  |
| TYR 006:041 | H49249610 | Clogherny              | Cairn   |
| TYR 009:004 | H30349491 | Urney Glebe            | Monastery, church, graveyard and cross-carved stone: Ernaide, Ernaidhe Or Irnaide |
| TYR 009:012 | H33279455 | Gallany                | Standing stone  |
| TYR 011:004 | H52069174 | Castledamph            | Rath  |
| TYR 011:007 | H50749168 | Eden Fore              | Rath  |
| TYR 011:013 | H47159156 | Letterbrat             | Portal tomb   |
| TYR 011:024 | H51799240 | Eden Back              | Field clearance cairn   |
| TYR 012:008 | H57809195 | Clogherny Glebe        | Rath  |
| TYR 014:002 | H05318386 | Slievedoo              | Aerial photo: crannog?  |
| TYR 015:007 | H23368510 | Cavan                  | Enclosure   |
| TYR 015:009 | H19888423 | Garvagh                | Enclosure   |
| TYR 016:006 | H25368332 | Castlegore             | Castle: Castle Gore and inscribed stone   |
| TYR 016:008 | H25208537 | Kilcroagh              | Enclosure   |
| TYR 016:010 | H25888602 | Freughlough            | Standing stone  |
| TYR 016:011 | H26008619 | Freughlough            | Standing stone  |
| TYR 016:018 | H26668539 | Churchtown, Castlederg | Portal tomb: Druid's Altar  |
| TYR 016:028 | H32348451 | Meaghy                 | Enclosure   |
| TYR 016:057 | H262845   | Churchtown, Castlederg | Historic settlement: Castlederg, Derg Bridge, Castle-Derrick Or Churchtown        |
| TYR 017:004 | H41888547 | Moyle Glebe            | Rath  |
| TYR 017:006 | H42988669 | Killymore              | Rath: Duntin Fort   |
| TYR 017:017 | H38338777 | Lisnatunny Glebe       | Enclosure   |
| TYR 017:023 | H34238874 | Clady Halliday         | Court Tomb: Carnmore  |
| TYR 017:024 | H35308677 | Carnkenny              | Ring cairn  |
| TYR 017:035 | H37328317 | Ballyrenan             | Portal tomb: Ballyrenan Chambered Grave or Cloghogle                              |

|             |           |                   |  |
|-------------|-----------|-------------------|--|
| TYR 017:044 | H40428640 | Pubble            | Rath   |
| TYR 017:045 | H41108686 | Crosh             | Tree ring  |
| TYR 017:047 | H40238582 | Newtownstewart    | Castle and bawn: Newtownstewart Castle                                       |
| TYR 017:049 | H34978749 | Ardstraw          | Pre-Norman and Medieval church (site of) and graveyard: Ard Sratha, Ardstraw |
| TYR 017:064 | H36268407 | Barons Court      | Aerial photo: field system   |
| TYR 018:012 | H45198817 | Corickmore        | Franciscan friary and graveyard:<br>Corick Abbey                             |
| TYR 018:020 | H46278604 | Dunbunrawer       | Rath   |
| TYR 018:025 | H43778325 | Ballykeel         | Enclosure  |
| TYR 018:037 | H49728457 | Gortin            | Cairn?   |
| TYR 018:041 | H49968552 | Gortin            | Aerial photo: two circular cropmarks   |
| TYR 018:042 | H52568686 | Meenadoo          | Aerial photo: two circular cropmarks   |
| TYR 018:045 | H49768451 | Gortin            | Aerial photo: oval mound – megalith  |
| TYR 019:001 | H61628381 | Aghascrebagh      | Prehistoric burial: monument - ring cairn?:<br>pagan graveyard               |
| TYR 019:012 | H62208445 | Crouck            | Megalithic tomb  |
| TYR 019:013 | H54258770 | Gorticashel Lower | Rath   |
| TYR 019:020 | H61278401 | Aghascrebagh      | Barrow   |
| TYR 019:029 | H60298624 | Alwories          | Aerial photo: circular cropmark  |
| TYR 019:043 | H62778458 | Crouck            | Penal altar?   |
| TYR 020:003 | H68568472 | Beaghmore         | Cairn  |
| TYR 020:004 | H68468424 | Beaghmore         | Seven stone circles, nine cairns and 10<br>alignments: Beaghmore Complex     |
| TYR 020:014 | H69028330 | Beleevna-Beg      | Stone circle   |
| TYR 020:024 | H64258879 | Tievenameena      | Aerial photo site: small raised enclosure                                    |
| TYR 020:044 | H65568419 | Broughderg        | Cairns and enclosure?  |
| TYR 020:056 | H65468459 | Broughderg        | Stone circle   |
| TYR 020:062 | H65418521 | Broughderg        | Burnt mound, stone circle and hut site                                       |
| TYR 021:003 | H74238365 | Ballynagilly      | Early neolithic settlement and houses and<br>beaker settlement site          |
| TYR 021:010 | H75198758 | Slaghtfreeden     | Cairn  |
| TYR 023:001 | H19517713 | Seegronan         | Standing stone possibly remains of<br>Megalithic tomb                        |
| TYR 023:009 | H22598023 | Leitrim           | Rath   |
| TYR 023:026 | H22638032 | Leitrim, Aghnahoo | Souterrain and possible rath site  |
| TYR 023:027 | H21478173 | Magheranageeragh  | Enclosure  |
| TYR 023:030 | H23608033 | Killen Far        | Standing stone   |
| TYR 023:033 | H17628151 | Aghyaran          | Holy well: Tobernagin  |
| TYR 023:035 | H22578002 | Leitrim           | Standing stone   |
| TYR 024:008 | H28898243 | Carncorran Glebe  | Portal tomb: Giant's Grave   |
| TYR 024:016 | H33898099 | Aghasessy         | Enclosure  |
| TYR 024:029 | H27787892 | Bullock Park      | Portal tomb  |
| TYR 025:008 | H41688262 | Beltany           | Court tomb: Cloghogle  |
| TYR 025:015 | H36178197 | Barons Court      | Cairn?   |
| TYR 025:030 | H35858023 | Legland           | Aerial photo: field system   |
| TYR 025:032 | H43038111 | Carrigans         | Aerial photo: large circular cropmark  |
| TYR 025:035 | H40078206 | Legacurry         | Aerial photo: circular enclosure   |
| TYR 025:036 | H40378027 | Gortnacreegh      | Standing stone   |
| TYR 026:003 | H44678112 | Reaghan           | Enclosure  |
| TYR 026:006 | H45588255 | Eskeradooey       | Rath   |
| TYR 027:009 | H54227691 | Oxtown            | Enclosure: Lisdoon   |
| TYR 027:054 | H60348034 | Leaghan           | Possible Megalithic tomb   |
| TYR 027:058 | H58267784 | Loughmacrory      | Cairn  |

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|-------------|-----------|-------------------------------|--|
| TYR 027:060 | H59687833 | Copney                        | Burial cairn   |
| TYR 027:063 | H57948106 | Cashel                        | Portal tomb?   |
| TYR 028:005 | H68067900 | Killucan                      | Megalithic tomb: Loadagarranbane   |
| TYR 028:012 | H70198209 | Evisbrack                     | Field clearance cairns   |
| TYR 028:015 | H70047912 | Killeenan                     | Standing stone   |
| TYR 028:017 | H72327903 | Drumshanbo Glebe              | Rath   |
| TYR 028:019 | H70797810 | Killeenan                     | Standing stone   |
| TYR 028:021 | H67828084 | Dungate                       | Two cist burials   |
| TYR 028:022 | H67958305 | Beaghmore                     | Sweat house  |
| TYR 028:029 | H71907983 | Tulnacross                    | Rath   |
| TYR 028:033 | H69138296 | Beleevna-Beg                  | Stone circle   |
| TYR 028:036 | H67147820 | Evishancrancussy              | Stone-lined feature  |
| TYR 029:014 | H77288223 | Feegarran                     | Wedge Tomb   |
| TYR 029:019 | H76777812 | Kildress Upper                | Medieval and Post-Medieval church and graveyard: Kildress Church   |
| TYR 029:033 | H73617688 | Magheraglass                  | Tree ring  |
| TYR 029:039 | H76648265 | Feegarran                     | Trackway   |
| TYR 029:056 | H76918270 | Creevagh                      | Cairn  |
| TYR 031:002 | H93417825 | Derrycrin (Conyngham)         | Altar site   |
| TYR 032:004 | H22167387 | Scraghy                       | Portal tomb  |
| TYR 033:002 | H31607212 | Dunnaree                      | Counterscarp rath  |
| TYR 033:010 | H27677397 | Curraghmacall                 | Enclosure  |
| TYR 034:014 | H40637545 | Dunwish                       | Enclosure  |
| TYR 034:018 | H42777019 | Fireagh (Thompson)            | Tree ring  |
| TYR 034:019 | H415736   | Aghnamoyle                    | Cairn?: Carn Hill  |
| TYR 034:022 | H43167539 | Mountjoy Forest West Division | Tree ring  |
| TYR 034:027 | H36347447 | Claraghmore                   | Aerial photo: elliptical enclosure   |
| TYR 035:009 | H52047559 | Fernagh, Racolpa              | Standing stone   |
| TYR 036:003 | H61377273 | Carrickmore, Old Church Yard  | Church, two graveyards, five wells and cross-carved stone: Termon Rock, Termon-Conyn, Termon Cumainig Or Tearmann Comain |
| TYR 036:006 | H60217518 | Mullan More                   | Cairn: Carnanbane  |
| TYR 036:021 | H601752   | Mullan More                   | Stone circle   |
| TYR 036:028 | H60877639 | Granagh                       | Court tomb and sweat house   |
| TYR 036:029 | H60997642 | Granagh                       | Standing stone   |
| TYR 036:031 | H58427467 | Skeboy                        | Wooden platform  |
| TYR 037:005 | H71697394 | Moymore                       | Rath   |
| TYR 037:008 | H71067451 | Moymore                       | Nine stone circles and two alignments: Moymore Stone Circles   |
| TYR 037:009 | H71037499 | Edendoit                      | Two standing stones  |
| TYR 037:010 | H67967569 | Murnells                      | Portal tomb and long cairn: Dermot and Grania's Bed  |
| TYR 037:020 | H65387330 | Tremoge                       | Stone circles (2) and double alignment   |
| TYR 037:037 | H66747318 | Tremoge                       | Cist burial  |
| TYR 037:048 | H70357508 | Moymore                       | Barrow   |
| TYR 038:010 | H81767119 | Donaghey                      | Counterscarp rath: Donaghey Fort   |
| TYR 038:017 | H82147536 | Tullywiggan                   | Rath   |
| TYR 038:021 | H81807428 | Donaghrisk                    | Enclosure  |
| TYR 038:025 | H80537469 | Gallanagh                     | Tree ring  |
| TYR 038:026 | H81237517 | Rockhead                      | Tree plantation  |
| TYR 038:030 | H81167484 | Loughry                       | Cist burial  |
| TYR 038:035 | H80977541 | Strifehill                    | Enclosure  |

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|-------------|-----------|------------------------------|--|
| TYR 038:038 | H82047375 | Donaghrisk                   | Aerial photo: circular cropmark  |
| TYR 038:042 | H77487284 | Rockdale                     | Rath   |
| TYR 039:008 | H86587200 | Ballywholan                  | Platform rath  |
| TYR 039:011 | H85487094 | Tamnylennan,<br>Stewartstown | Rath   |
| TYR 039:013 | H85437131 | Tamnylennan                  | Rath   |
| TYR 039:019 | H82907170 | Sessiagh                     | Counterscarp rath  |
| TYR 039:034 | H89587544 | Kilsally                     | Rath   |
| TYR 039:065 | H89287258 | Ballynafeagh                 | Rath   |
| TYR 040:009 | H92727435 | Aghacolumb                   | Enclosure and possible church site   |
| TYR 040:010 | H94427350 | Killycanavan Lower           | Rath: fort field   |
| TYR 040:013 | H92677191 | Killycolpy                   | Aerial photo: circular cropmark  |
| TYR 041:004 | H31536681 | Greenan                      | Platform rath  |
| TYR 042:004 | H38526613 | Mullaghbane                  | Counterscarp rath  |
| TYR 042:010 | H42576379 | Cranny                       | Enclosure  |
| TYR 043:001 | H45046845 | Relaghdooy                   | Enclosure  |
| TYR 043:015 | H52056520 | Curr                         | Platform rath  |
| TYR 043:018 | H53496638 | Beragh                       | Standing stone   |
| TYR 043:024 | H50066727 | Donaghanie                   | Enclosure  |
| TYR 044:007 | H55316457 | Radergan                     | Standing stone   |
| TYR 044:028 | H57386785 | Cloghfin                     | Rath and C17th Bawn: Bawntown  |
| TYR 044:037 | H54396853 | Derroar                      | Enclosure  |
| TYR 044:045 | H62256933 | Altanagh                     | Multiperiod burial mound - court tomb, four Neolithic pit burials, eight Bronze Age burials and rath: Altanagh |
| TYR 044:051 | H63176506 | Lurganboy                    | Cist burial  |
| TYR 045:009 | H72316563 | Crosscavanagh                | Enclosure  |
| TYR 046:006 | H78376476 | Mullaghmore                  | Rath   |
| TYR 046:008 | H78196660 | Killygavanagh                | Rath   |
| TYR 046:011 | H76886538 | Donaghmore                   | Composite carved cross   |
| TYR 046:018 | H78126867 | Lisnagleer                   | Platform rath  |
| TYR 046:021 | H76706987 | Curlonan                     | Holy well: Toberdoney  |
| TYR 047:014 | H87146767 | Killary Glebe                | Medieval parish church (site of) and post-Medieval church and graveyard: Clonoe                                |
| TYR 047:018 | H89856555 | Derryloughan                 | Island, possibly crannog   |
| TYR 047:029 | H86436696 | Magheramulkenny              | Bullaun stone  |
| TYR 049:011 | H31186097 | Tummery                      | Rath   |
| TYR 049:014 | H28686096 | Lisdoo                       | Rath   |
| TYR 049:017 | H26446042 | Shanmullagh West             | Rath   |
| TYR 049:025 | H29715723 | Gargadis                     | Rectangular enclosure: Gargadis Fort   |
| TYR 049:027 | H29086097 | Lisdoo                       | Standing stone   |
| TYR 050:004 | H43306045 | Rathwarren                   | Rath   |
| TYR 050:013 | H38595912 | Rahony                       | Rath   |
| TYR 050:014 | H38786082 | Rakeeranbeg                  | Enclosure  |
| TYR 050:017 | H39766232 | Tattycor                     | Rath   |
| TYR 050:030 | H36325761 | Glengen                      | Aerial photo: large, double-ditched enclosure  |
| TYR 051:003 | H51885816 | Eskragh                      | Enclosure  |
| TYR 051:009 | H50606289 | Beagh                        | Enclosure  |
| TYR 051:012 | H46815756 | Aghafad                      | Rath   |
| TYR 051:031 | H44746300 | Donacavey                    | Cross base: St Patrick's Cross   |
| TYR 051:041 | H49796272 | Letfern                      | Enclosure  |
| TYR 051:043 | H50265968 | Corkill                      | Enclosure  |
| TYR 052:008 | H60515868 | Sess Kilgreen                | Passage tomb? - standing stones (2):<br>Sess Kilgreen  |

|             |           |                  |   |
|-------------|-----------|------------------|---|
| TYR 052:009 | H60275882 | Sess Kilgreen    | Mound   |
| TYR 052:011 | H59905857 | Glenchuil        | Graveyard   |
| TYR 052:021 | H55745874 | Tycanny          | Rath  |
| TYR 053:015 | H73025864 | Lisgallon        | Rath  |
| TYR 054:009 | H77576200 | Eskragh          | Rath  |
| TYR 054:023 | H80635781 | Crew             | Rath  |
| TYR 057:003 | H35925624 | Lifford          | Enclosure   |
| TYR 057:006 | H38385605 | Crocknafarbrague | Cairn   |
| TYR 057:009 | H39325590 | Carryglass       | Standing stone  |
| TYR 057:011 | H39465700 | Lisconrea        | Rath  |
| TYR 057:013 | H39305670 | Lisconrea        | Wedge tomb and megalith   |
| TYR 058:003 | H49175233 | Bolies           | Holy well   |
| TYR 058:006 | H49585343 | Skelagh          | Rath  |
| TYR 058:007 | H50795411 | Mallabeny        | Hillfort  |
| TYR 058:035 | H51075266 | Carntall Beg     | Enclosure   |
| TYR 059:006 | H58545705 | Gort             | Multiperiod church and graveyard with carved stones, cross and sheela-na-gig: Errigal Keerogue, Airegal-Da-Chiarog and Airecal-Da-Chiaroc |
| TYR 059:007 | H56615695 | Glennageeragh    | Enclosure   |
| TYR 059:008 | H58625646 | Errigal          | Rath  |
| TYR 059:013 | H59955700 | Ballysaggart     | Church, graveyard and font  |
| TYR 059:017 | H61795668 | Tullybryan       | Rath  |
| TYR 059:035 | H63045475 | Drumaslaghy      | Rath  |
| TYR 059:038 | H63045366 | Lismore          | Enclosure   |
| TYR 059:042 | H54275318 | Corick           | Platform rath   |
| TYR 059:051 | H61845316 | Derrymeen        | Enclosure   |
| TYR 059:057 | H56445180 | Ballynagurragh   | Enclosure   |
| TYR 059:067 | H62335561 | Lisdoart         | Platform rath   |
| TYR 059:072 | H63245749 | Ballygawley      | Castle  |
| TYR 060:027 | H68395290 | Glencull         | Rath and cist burial  |
| TYR 060:040 | H71075671 | Cranslough       | Crannog?  |
| TYR 061:005 | H80415409 | Lisnacroy        | Rath  |
| TYR 061:010 | H81085485 | Lisgobban        | Bivallate/trivallate rath   |
| TYR 061:018 | H74855556 | Gort             | Friary  |
| TYR 061:029 | H76405659 | Clogherny        | Crannog   |
| TYR 064:011 | H51074844 | Slatbeg          | Enclosure   |
| TYR 064:019 | H52455091 | Freughmore       | Standing stone  |
| TYR 064:020 | H51175081 | Tullanavert      | Enclosure   |
| TYR 064:041 | H49914989 | Ballagh          | Crannog   |
| TYR 065:001 | H57804547 | Ballywholan      | Settlement  |
| TYR 065:003 | H55554899 | Ballywholan      | Megalith  |
| TYR 065:014 | H54785050 | Clogher Demesne  | Enclosure   |
| TYR 065:015 | H53915070 | Clogher Demesne  | Enclosure   |
| TYR 065:028 | H55474920 | Ballywholan      | Settlement  |
| TYR 066:006 | H70494962 | Glenkeen         | Platform rath   |
| TYR 066:007 | H70335048 | Glendavagh       | Tree ring   |
| TYR 068:001 | H49604288 | Glenoo           | Church/graveyard/bullaun  |

## APPENDIX 2: PRO FORMA USED DURING THE CAMSAR FIELD SURVEY

|   |   |   |  |                                  |  |
|---|---|---|--|----------------------------------|--|
| <b>NISMR No.</b> Unique reference no.   |   | <b>Grid Reference</b> 8 figure Irish Grid reference               |  | <b>Townland</b> Location of site |  |
| <b>Landuse Cat.</b><br>See code list  | <b>Structural Cat.</b><br>See code list | <b>Site Type</b> Monument classification,<br>as listed in the SMR | <b>Protection</b> Is site afforded any formal<br>protection? See code list | <b>Altitude</b>                  |  |
| <b>Field Boundaries</b> (e.g. contemporary/intrusive later/owners attitude towards monument i.e. disregard)<br>Records relationship between monument & adjacent boundaries. Do they respect or ignore site? Is site located close to parish or td boundaries? |   |   |  |                                  |  |

|   |                             |   |   |
|---|-----------------------------|---|---|
| <b>Land use - Site Specific On Site</b> |                             |   | <b>Comments</b><br>Any further information relating to the on-site land use |
| Previous<br>As noted in<br>SMR          | Present<br>See code<br>list | % Site<br>% of site<br>surface area<br>affected |   |
|   |                             |   |   |
|   |                             |   |   |
|   |                             |   |   |

|   |                             |  |   |
|---|-----------------------------|--|---|
| <b>Land use - Site Specific Around Site</b> |                             |  | <b>Comments</b><br>Any further information relating to the around-site land use |
| Previous<br>As noted in<br>SMR              | Present<br>See code<br>list |  |   |
|   |                             |  |   |
|   |                             |  |   |
|   |                             |  |   |

|                |   |
|----------------|---|
| <b>Fencing</b> | Site Fenced? Y/N Has the site been fenced as a management tool, eg. to restrict or control access?<br>Condition (e.g. recent/broken) Is the fence effective in its function?<br>Type of fence Material from which it is constructed<br>Distance of fence from edge of monument Is the 10m zone respected? |
|----------------|---|

|   |                             |                               |                         |                          |
|---|-----------------------------|-------------------------------|-------------------------|--------------------------|
| <b>Remains</b><br>See code lists  | Is the site visible?<br>Y/N | Archaeological Site?<br>Y/N/? | Survival<br>1 2 3 4 5 6 | Condition<br>1 2 3 4 5 6 |
| <b>Comments</b> (e.g. human interference and management)<br>Are the remains as described in the SMR, if they have changed, how? Note any changes in the remains here. |                             |                               |                         |                          |

|  |
|--|
| <b>Surface Problems</b> (e.g. ploughing, trampling, planting, scrub growth: localized/widespread)<br>Note any problems with the condition of the site here. This should be specific to the surface, such as livestock erosion. |
| <b>Sub-Surface Problems</b> (e.g. rabbits, badgers, subsidence: localized/widespread)<br>Note any problems with the sub-surface condition of the site here. This might be burrowing, for example.                              |

|                         |                     |                      |                     |                      |                     |   |
|-------------------------|---------------------|----------------------|---------------------|----------------------|---------------------|---|
| <b>Damage Sustained</b> |                     |                      |                     |                      |                     | <b>Observations</b><br>Any further information relating to damage to the site |
| <b>Past</b>             |                     | <b>Recent</b>        |                     | <b>Future Risk</b>   |                     |   |
| Category<br>See code    | % Site<br>% of site | Category<br>See code | % Site<br>% of site | Category<br>See code | % Site<br>% of site |   |
| list                    | surface area        | list                 | surface area        | list                 | surface area        |   |
|                         | affected            |                      | affected            |                      | affected            |   |
|                         |                     |                      |                     |                      |                     |   |

|  |
|--|
| <b>Notes</b><br>Any further information may be recorded here. This may not specifically relate to the above and may, for example, relate to information gathered from a landowner. |
|--|



| <b>Photographs</b>   |           |         |          |           |         |
|--|-----------|---------|----------|-----------|---------|
| Reel No.   | Frame No. | Caption | Reel No. | Frame No. | Caption |
| If using film photography, reel and frame numbers should be recorded here. Digital photograph captions can also be noted here. |           |         |          |           |         |
|  |           |         |          |           |         |
|  |           |         |          |           |         |
|  |           |         |          |           |         |

| <b>Map Evidence</b>                   |        |        |
|---------------------------------------|--------|--------|
| 1st Ed                                | 2nd Ed | 3rd Ed |
| Is the site present? If so, which map |        |        |
| & what is recorded? Taken from SMR.   |        |        |

| <b>Last Visit</b>      |   |
|------------------------|---|
| Date                   | Deteriorated since last visit?                                      |
| Date of last recorded  | Is it possible to tell from SMR if the site has deteriorated        |
| visit. Taken from SMR. | significantly since the last visit? If so, how has it deteriorated? |

|  |                           |
|--|---------------------------|
| <b>Recorder</b> Field workers initials | <b>Date</b> Date of visit |
|--|---------------------------|

## APPENDIX 3: LAND USE CATEGORIES

### Specific land use categories

| Code | Land use             | Code | Land use                |
|------|----------------------|------|-------------------------|
| 1    | Marine               | 26   | Waste ground            |
| 2    | Coastland            | 27   | Derelict                |
| 3    | Dunes                | 28   | Road                    |
| 4    | Raised beach         | 29   | Verge                   |
| 5    | Lake                 | 30   | Built over              |
| 6    | Reservoir            | 31   | Garden                  |
| 7    | River                | 32   | Orchard                 |
| 8    | Old/Mixed woodland   | 33   | Recreation              |
| 9    | Deciduous woodland   | 34   | Cemetery                |
| 10   | Coniferous woodland  | 35   | State Care Monument     |
| 11   | Scrub                | 36   | Pasture                 |
| 12   | Parkland             | 37   | Housing estate          |
| 13   | Arable               | 38   | Farmyard                |
| 14   | Unimproved grassland | 39   | Railway track           |
| 15   | Improved grassland   | 40   | Urban                   |
| 16   | Wet pasture          | 41   | Marsh                   |
| 17   | Rough grazing        | 42   | Slurry pit              |
| 18   | Heathland            | 43   | Field division/boundary |
| 19   | Raised bog           | 44   | Ridge                   |
| 20   | Blanket bog          | 45   | Post and wire boundary  |
| 21   | Cutaway bog          | 46   | Stone wall              |
| 22   | Reclaimed bog        | 47   | Bird sanctuary          |
| 23   | Quarry               | 48   | Lazy bedded             |
| 24   | Sand/Gravel pit      | 49   | Rock outcrop            |
| 25   | Tip                  | 50   | Industrial              |

**General land use categories**

| <b>Code and category</b> |                             | <b>Land use type</b>  |
|--------------------------|-----------------------------|---|
| <b>1</b>                 | <b>Improved grassland</b>   | <b>Improved grassland</b>   |
| <b>2</b>                 | <b>Unimproved grassland</b> | Pasture<br>Unimproved grassland<br>Lazy-bedded  |
| <b>3</b>                 | <b>Arable</b>               | Arable  |
| <b>4</b>                 | <b>Freshwater</b>           | Lake<br>Reservoir<br>River  |
| <b>5</b>                 | <b>Wetland</b>              | Wet pasture<br>Rough grazing<br>Heathland<br>Raised bog<br>Blanket bog<br>Cutaway bog<br>Reclaimed bog<br>Marsh   |
| <b>6</b>                 | <b>Development</b>          | Quarry<br>Sand/gravel pit<br>Tip<br>Wasteland<br>Derelict<br>Road<br>Verge<br>Built over<br>Garden<br>Orchard<br>Recreation<br>Cemetery<br>Housing estate<br>Farmyard<br>Railway track<br>Urban |
| <b>7</b>                 | <b>Boundaries</b>           | Field boundary<br>Hedge<br>Post and wire boundary<br>Stone wall   |
| <b>8</b>                 | <b>Woodland</b>             | Old/Mixed woodland<br>Deciduous woodland<br>Coniferous woodland<br>Scrub<br>Park  |
| <b>9</b>                 | <b>Coastal zone</b>         | Marine<br>Coastland<br>Dunes<br>Raised beach  |
| <b>10</b>                | <b>Other</b>                | Slurry pit<br>Bird sanctuary<br>Rock outcrop  |

## APPENDIX 4: STRUCTURAL CATEGORIES

| Code and category                | General monument type     | Specific monument type                            |
|----------------------------------|---------------------------|---|
| <b>1. Orthostatic Monuments</b>  | Dolmen?                   |   |
|                                  | Embanked stone circle     |   |
|                                  | Henge                     |   |
|                                  | Henge and Megalithic tomb |   |
|                                  | Megalithic tomb:          | Alignment   |
|                                  |                           | Cairn   |
|                                  |                           | Cairn kerb  |
|                                  |                           | Chambered tomb                                    |
|                                  |                           | Cist burial                                       |
|                                  |                           | Court tomb: centre court tomb,<br>dual court tomb |
|                                  |                           | Decorated standing stone                          |
|                                  |                           | Dolmen  |
|                                  |                           | Long cairn  |
|                                  |                           | Passage tomb                                      |
|                                  |                           | Portal tomb: double portal tomb                   |
|                                  |                           | Round cairn                                       |
|                                  |                           | Standing stones                                   |
|                                  |                           | Urns  |
|                                  |                           | Wedge tomb  |
|                                  |                           | Megalithic complex                                |
|                                  |                           | Recumbent stone                                   |
|                                  |                           | Standing stone                                    |
|                                  |                           | Standing stone complex                            |
|                                  |                           | Stone   |
|                                  |                           | Stone alignment                                   |
|                                  |                           | Stone circle                                      |
|                                  |                           | Stone circle and alignment                        |
|                                  | Stone circle and cairn    |   |
|                                  | Stone circle complex      |   |
|                                  | Stone row                 |   |
|                                  | Stone setting             |   |
| <b>2. Piled stone structures</b> | Cairn:                    | Cairn kerb  |
|                                  |                           | Clearance cairn                                   |
|                                  |                           | Field clearance cairn                             |
|                                  |                           | Long cairn  |
|                                  |                           | Multiple cist cairn                               |
|                                  |                           | Ring cairn  |
|                                  |                           | Round cairn                                       |
|                                  | Cashel                    |   |
|                                  | Cist:                     | Barrow  |
|                                  |                           | Cairn   |
|                                  |                           | Cist burial                                       |
|                                  |                           | Cist cemetery                                     |
|                                  |                           | Long cist   |
|                                  |                           | Multiple cist cairn                               |
|                                  |                           | Polygonal cist                                    |
|                                  |                           | Ring ditch  |
|                                  | Short cist                |   |
|                                  | Complex cairn             |   |

| Code and category    | General monument type            | Specific monument type |
|----------------------|----------------------------------|------------------------|
|                      | Field boundary                   |                        |
|                      | Field clearance cairn            |                        |
|                      | Field wall                       |                        |
|                      | Multiple cist cairn              |                        |
|                      | Pre-bog landscape                |                        |
|                      | Aerial photo site:               | Cairn (?)              |
| <b>3. Earthworks</b> | Assembly site                    |                        |
|                      | Axe factory                      |                        |
|                      | Bank                             |                        |
|                      | Barrow:                          | Barrow cemetery        |
|                      |                                  | Bowl barrow            |
|                      |                                  | Cist                   |
|                      |                                  | Ring barrow            |
|                      |                                  | Round barrow           |
|                      | Booley houses                    |                        |
|                      | Booley huts                      |                        |
|                      | Burnt mound*                     |                        |
|                      | Conjoined earthworks             |                        |
|                      | Cropmark                         |                        |
|                      | Earthwork                        |                        |
|                      | Earthwork ecclesiastical site    |                        |
|                      | Ecclesiastical site:             | Enclosure              |
|                      | Encampment                       |                        |
|                      | Enclosure                        |                        |
|                      | Entrenchment                     |                        |
|                      | Field enclosure                  |                        |
|                      | Field system                     |                        |
|                      | Fortification:                   | Bailey                 |
|                      |                                  | Earthwork              |
|                      |                                  | Encampment             |
|                      |                                  | Entrenchment           |
|                      |                                  | Hillfort               |
|                      |                                  | Motte                  |
|                      |                                  | Promontory fort        |
|                      | Hillfort                         |                        |
|                      | Hillfort and ecclesiastical site |                        |
|                      | Hilltop enclosure                |                        |
|                      | Hut                              |                        |
|                      | Hut circles                      |                        |
|                      | Hut group                        |                        |
|                      | Hut site                         |                        |
|                      | Landscape feature                |                        |
|                      | Linear banks                     |                        |
|                      | Linear earthwork                 |                        |
|                      | Moated site                      |                        |
|                      | Motte                            |                        |
|                      | Motte and bailey                 |                        |
|                      | Mound                            |                        |
|                      | Mound with cross slab*           |                        |
|                      | Mound? Or enclosure              |                        |
|                      | Open field system                |                        |
|                      | Promontory                       |                        |
|                      | Promontory fort                  |                        |

| Code and category   | General monument type          | Specific monument type  |
|---|--------------------------------|---|
|   | Rath:                          | Annexe  |
|   |                                | Bivallate rath  |
|   |                                | Conjoined raths   |
|   |                                | Counterscarp rath   |
|   |                                | C'Scarp Platform rath   |
|   |                                | Multivallate rath   |
|   |                                | Oval rath   |
|   |                                | Part of rath Group  |
|   |                                | Penannular rath   |
|   |                                | Platform rath   |
|   |                                | Raised rath   |
|   |                                | Rath and annexe   |
|   |                                | Rath pair   |
|   |                                | Stone-faced rath  |
|   |                                | Sub-rectangular rath  |
|   |                                | Tree ring   |
|   |                                | Trivallate rath   |
|   |                                | Univallate rath   |
|   | Rath and souterrain*           |   |
|   | Rath group                     |   |
|   | Rath motte and bailey          |   |
|   | Ring barrow                    |   |
|   | Ring ditch                     |   |
|   | Settlement site*               |   |
|   | Tree ring                      |   |
|   | Upland settlement              |   |
|   | Aerial photo site:             | Barrow  |
|   |                                | Cropmark: circular / - elliptical - /<br>linear - / oval - / (sub-) rectangular |
|   |                                | Drainage feature  |
|   |                                | Enclosure (?): double-ditched - /<br>elliptical - / sub-rectangular             |
|   |                                | Hillfort  |
|   |                                | Linear banks  |
|   |                                | Rath  |
|   |                                | Ring ditch  |
|   |                                | Soil marks  |
|   |                                | Vegetation anomaly  |
| <b>4. Freshwater structures<br/>(waterlogged/wetland)</b> | Boat timber                    |   |
|   | Bridge                         |   |
|   | Causeway                       |   |
|   | Cooking place                  |   |
|   | Crannog                        |   |
|   | Ecclesiastical site: holy well |   |
|   | Fish traps                     |   |
|   | Holy well                      |   |
|   | Horizontal mill                |   |
|   | Island                         |   |
|   | Platform site                  |   |
|   | Spring                         |   |
|   | Track way                      |   |
|   | Votive Site                    |   |

| Code and category            | General monument type      | Specific monument type                                       |
|------------------------------|----------------------------|--|
|                              | Water mill                 |  |
|                              | Well                       |  |
|                              | Wooden platform            |  |
| <b>5. Masonry structures</b> | Architectural fragment     |  |
|                              | Artillery fort             |  |
|                              | Bawn                       |  |
|                              | Boat house                 |  |
|                              | City walls                 |  |
|                              | Corbelled pig sites (2)    |  |
|                              | Corn-drying kiln           |  |
|                              | Cottage                    |  |
|                              | Doorway                    |  |
|                              | Dry-stone structure        |  |
|                              | Ecclesiastical site:       | Abbey  |
|                              |                            | Archbishop's residence                                       |
|                              |                            | Architectural fragments                                      |
|                              |                            | Augustinian abbey / - nunnery / - priory                     |
|                              |                            | Bath houses  |
|                              |                            | Benedictine abbey  |
|                              |                            | Cell   |
|                              |                            | Church: parish - / Pre-Norman / - Medieval - / Post-Medieval |
|                              |                            | Cistercian abbey / - nunnery                                 |
|                              |                            | Convent  |
|                              |                            | Dominican abbey / -friary / - priory                         |
|                              |                            | Final stone  |
|                              |                            | Font   |
|                              |                            | Franciscan friary  |
|                              |                            | Friary   |
|                              |                            | Hospital   |
|                              |                            | Leper's hospital   |
|                              |                            | Monastery  |
|                              |                            | Monastic settlement  |
|                              |                            | Mortuary house   |
|                              |                            | Nunnery  |
|                              |                            | Penal site   |
|                              |                            | Round tower  |
|                              |                            | Pre-Monstratensian abbey                                     |
|                              |                            | Priory   |
|                              | Entrance gates and screen  |  |
|                              | Entrenchments and barracks |  |
|                              | Fortification:             | Artillery fort   |
|                              |                            | Battle site  |
|                              |                            | Bawn   |
|                              |                            | Castle   |
|                              |                            | Curtain wall   |
|                              |                            | Defended house   |
|                              |                            | Fortified house  |
|                              |                            | Fortified manor house  |
|                              |                            | Fortified outcrop  |
|                              |                            | House and bawn   |
|                              |                            | Keep   |
|                              |                            | Magazine   |

| Code and category      | General monument type   | Specific monument type                    |
|------------------------|---|---|
|                        |   | Merchants stores                          |
|                        |   | Plantation fort                           |
|                        |   | Plantation house                          |
|                        |   | Stone blockhouse                          |
|                        |   | Tower                                     |
|                        |   | Tower-house                               |
|                        |   | Triangular citadel                        |
|                        | Hermits cell?   |   |
|                        | Hotel   |   |
|                        | House   |   |
|                        | House and barn  |   |
|                        | House and souterrain  |   |
|                        | Lime kiln   |   |
|                        | Manor house and? Bawn   |   |
|                        | Market-later court house  |   |
|                        | Martello tower  |   |
|                        | Mill  |   |
|                        | Paved road  |   |
|                        | Pottery kiln  |   |
|                        | Rath:   | Souterrain                                |
|                        |   | Artillery fort/bastion                    |
|                        | Souterrain  |   |
|                        | Souterrain and Ogham stone*   |   |
|                        | Souterrain or Megalithic tomb*  |   |
|                        | Stone structure   |   |
|                        | Structure   |   |
|                        | Sweat house   |   |
|                        | Tower   |   |
|                        | Tower-house   |   |
|                        | Town walls  |   |
|                        | Vitrified fort  |   |
|                        | Windmill  |   |
| <b>6. Carved Stone</b> | Altar   |   |
|                        | Bullaun   |   |
|                        | Carved stone  |   |
|                        | Coffin lid  |   |
|                        | Coffin stone  |   |
|                        | Cross / - base / - carved standing stone / - head / - inscribed stone / - shaft and base / - slab |   |
|                        | Cup marks / stone   |   |
|                        | Cup-and-ring-marked stone   |   |
|                        | Cup-marked stone  |   |
|                        | Cursing stone   |   |
|                        | Decorated stone   |   |
|                        | Ecclesiastical site:  | Coffin lid: Anglo-Norman coffin lid       |
|                        |   | Cross: / - base / - carved stone / - slab |
|                        |   | Grave slab                                |
|                        |   | Querns                                    |
|                        |   | Shella-na-gig                             |



| Code and category       | General monument type            | Specific monument type |
|-------------------------|----------------------------------|------------------------|
|                         |                                  | Stone lined grave*     |
|                         | Font and architectural fragments |                        |
|                         | Font stone                       |                        |
|                         | Grave slab                       |                        |
|                         | High cross                       |                        |
|                         | Holed stone                      |                        |
|                         | Inauguration stone               |                        |
|                         | Inscribed stone                  |                        |
|                         | Mill stone                       |                        |
|                         | Oblisk                           |                        |
|                         | Ogham stone                      |                        |
|                         | Quern stone                      |                        |
|                         | Rock scribings                   |                        |
|                         | Rock-cut seat                    |                        |
|                         | Rocking stone                    |                        |
|                         | Saddle quern                     |                        |
|                         | Stone cross                      |                        |
|                         | Stone effigy                     |                        |
|                         | Stone figure                     |                        |
|                         | Stone graves                     |                        |
|                         | Stone head                       |                        |
|                         | Stone idol                       |                        |
|                         | Tombstone                        |                        |
| <b>7. Miscellaneous</b> | Battle site                      |                        |
|                         | Bier stone                       |                        |
|                         | Boulder                          |                        |
|                         | Cave                             |                        |
|                         | Cave with rock scribings         |                        |
|                         | Coin hoard                       |                        |
|                         | Bell                             |                        |
|                         | Deserted settlement / - village  |                        |
|                         | Doon                             |                        |
|                         | Ecclesiastical site:             | Penal site             |
|                         |                                  | Stoup                  |
|                         |                                  | Well                   |
|                         | Fair site                        |                        |
|                         | Feature                          |                        |
|                         | Find spot                        |                        |
|                         | Flax dam                         |                        |
|                         | Flint knapping site              |                        |
|                         | Flint scatter                    |                        |
|                         | Flint working site               |                        |
|                         | Folklore site                    |                        |
|                         | Ford                             |                        |
|                         | Furnace                          |                        |
|                         | Gates and screen                 |                        |
|                         | Glass making site                |                        |
|                         | Habitation site                  |                        |
|                         | Hearth                           |                        |
|                         | Hedge school                     |                        |
|                         | Hospital site                    |                        |

| Code and category             | General monument type       | Specific monument type                             |
|-------------------------------|-----------------------------|--|
|                               | Inauguration site           |  |
|                               | Inscribed cave              |  |
|                               | Kiln                        |  |
|                               | Mass cave                   |  |
|                               | Mass rock                   |  |
|                               | Mass site                   |  |
|                               | Merridan marker             |  |
|                               | Midden                      |  |
|                               | Modern feature              |  |
|                               | Natural feature             |  |
|                               | Non-Antiquity               |  |
|                               | Occupation material         |  |
|                               | Occupation site             |  |
|                               | Outcrop                     |  |
|                               | Penal altar                 |  |
|                               | Penal site:                 | Mass altar   |
|                               |                             | Mass site  |
|                               |                             | Penal altar  |
|                               | Penitential station stone   |  |
|                               | Penitential stations        |  |
|                               | Quarry                      |  |
|                               | Road                        |  |
|                               | Rock fortification          |  |
|                               | Rock outcrop                |  |
|                               | Route way                   |  |
|                               | Settlement                  |  |
|                               | Settlement complex          |  |
|                               | Sheep fold                  |  |
|                               | Shell midden                |  |
|                               | Stone axe factory           |  |
|                               | Stone-lined feature         |  |
|                               | Stone feature               |  |
|                               | Traditional site            |  |
|                               | Tree plantation             |  |
|                               | Tree square*                |  |
|                               | Tree triangle*              |  |
|                               | Uncertain                   |  |
|                               | Village                     |  |
|                               | Wooden stakes               |  |
|                               | Wooden structures           |  |
|                               | Aerial photo site:          | Natural feature                                    |
|                               |                             | Non-antiquity                                      |
|                               |                             | Quarry*  |
| <b>8. Burial/burial mound</b> | Burial / - ground / - mound |  |
|                               | Cemetery                    |  |
|                               | Cremated burial             |  |
|                               | Ecclesiastical site:        | Burial ground                                      |
|                               |                             | Children's burial                                  |
|                               |                             | Ground / graveyard (aka killen)                    |
|                               |                             | Killen (aka children's graveyard or burial ground) |
|                               |                             | Graveyard  |

| Code and category | General monument type         | Specific monument type |
|-------------------|-------------------------------|------------------------|
|                   | Graveyard                     |                        |
|                   | Ecclesiastical site:          | Tomb                   |
|                   | Killeen                       |                        |
|                   | Pit burial                    |                        |
|                   | Rock-cut grave                |                        |
|                   | Uncisted Burial               |                        |
|                   | Urn burial                    |                        |
|                   | Urn burial and cist with rock |                        |
|                   | Urn field                     |                        |
|                   | Urns                          |                        |

\* Monument types marked with a (\*) may belong to one or more categories

## APPENDIX 5: SURVIVAL CATEGORIES

| Code | Survival   |
|------|--|
| 1    | 75-100% Complete/substantially complete                |
| 2    | 50-75% Substantial - vast majority definable           |
| 3    | 25-50% Some definable features                         |
| 4    | 1-25% Traces/ barely visible - no definable features   |
| 5    | All above ground features removed - no visible remains |
| 6    | Survival uncertain - no visible remains                |

## APPENDIX 6: CONDITION CATEGORIES

| Code | Condition   |
|------|---|
| 1    | 75-100% Excellent (maintained)                        |
| 2    | 50-75% Good (not fully maintained)                    |
| 3    | 25-50% Fair (not maintained)                          |
| 4    | 1-25% Poor (not maintained)                           |
| 5    | All above ground remains removed - no visible remains |
| 6    | Condition uncertain - no visible remains              |

**APPENDIX 7: DAMAGE TYPE CODES**

| Code | Damage                          | Code | Damage                           |
|------|---------------------------------|------|----------------------------------|
| 1    | None apparent                   | 18   | Flooding                         |
| 2    | Cultivation                     | 19   | Collapse                         |
| 3    | Livestock                       | 20   | Rabbit burrowing                 |
| 4    | Improvements/Landscaping        | 21   | Reseeding                        |
| 5    | Reclamation                     | 22   | The 'Sidth' (fairies)/protection |
| 6    | Mineral extraction/Quarrying    | 23   | Badgers                          |
| 7    | Drainage                        | 24   | Turf cutting                     |
| 8    | Reservoirs                      | 25   | Unknown                          |
| 9    | Building                        | 26   | Burials                          |
| 10   | Roads                           | 27   | Agricultural traffic             |
| 11   | Visitors                        | 28   | Unstable/ fallen trees           |
| 12   | Vandalism                       | 29   | Scrub encroachment               |
| 13   | Dumping                         | 30   | Overgrown                        |
| 14   | Wind + weather + time (erosion) | 31   | Supplementary feeding sites      |
| 15   | Field clearance                 | 32   | Water troughs                    |
| 16   | Tree planting                   | 33   | Archaeological excavation        |
| 17   | Removal                         |      |                                  |

## APPENDIX 8: CATEGORIES RECOMMENDED FOR RECORDING DAMAGE EXTENT

| Code | Damage extent | Example  |
|------|---------------|--|
| 1    | Superficial   | The damage to the archaeological fabric appears to be superficial. For example, scrub is growing at the edge of a court tomb on one side. The damage at present is slight but if the scrub takes hold it will cause 'significant' or even 'severe' damage. |
| 2    | Significant   | The damage has impacted significantly on the monument, causing considerable loss of the archaeological fabric. For example, heavy livestock trampling of an earthwork which has caused erosion of banks and/or poaching of the surface layers.             |
| 3    | Severe        | The monument has been damaged severely. For example a house has been constructed over part of a rath, resulting in the complete loss of part of the monument.  |
| 4    | Complete      | The monument has been wholly impacted upon and the archaeological fabric has been removed to ground level. Some archaeological remains may have remained undamaged below ground level, but this cannot be tested without excavation.                       |
| 5    | Removed       | The site has been entirely removed. The site has been removed by quarrying or road construction, for example, resulting in the complete loss of the archaeological fabric.   |

## **APPENDIX 9: CATEGORIES RECOMMENDED FOR RECORDING SITE VISIBILITY**

| <b>Code</b> | <b>Is the site visible?</b>                   |
|-------------|---|
| 1           | Yes   |
| 2           | No: The site is inherently subterranean       |
| 3           | No: The site is obscured from view            |
| 4           | No: All above ground traces have been removed |



## APPENDIX 10: PRO FORMA TO BE USED IN FUTURE FIELD SURVEY

|   |                        |                  |
|---|------------------------|------------------|
| <b>NISMR No.</b>  | <b>Grid Reference</b>  | <b>Townland</b>  |
| <b>Landuse Cat.</b>   | <b>Structural Cat.</b> | <b>Site Type</b> |
| <b>Protection</b>   | <b>Altitude</b>        |                  |
| Field Boundaries (e.g. contemporary/intrusive later/owners attitude towards monument i.e. dis/regard) |                        |                  |

**Site description/notes**

| <b>Landuse</b>  |                |               | <b>Around Site</b> |                | <b>Comments</b> |
|-----------------|----------------|---------------|--------------------|----------------|-----------------|
| <b>On Site</b>  |                | <b>% site</b> | <b>Previous</b>    | <b>Present</b> |                 |
| <b>Previous</b> | <b>Present</b> |               |                    |                |                 |
| _____           | _____          | _____         | _____              | _____          |                 |
| _____           | _____          | _____         | _____              | _____          |                 |
| _____           | _____          | _____         | _____              | _____          |                 |

**Fencing** Site Fenced? Y/N  
 Condition (e.g. recent/broken)  
 Type of fence  
 Distance of fence from edge of monument

|   |                      |                      |             |             |
|---|----------------------|----------------------|-------------|-------------|
| <b>Remains</b>                                    | Is the site visible? | Archaeological site? | Survival    | Condition   |
|   | 1 2 3 4              | Y/N/?                | 1 2 3 4 5 6 | 1 2 3 4 5 6 |
| Comments (e.g. human interference and management) |                      |                      |             |             |

**Surface Problems** (e.g. ploughing, trampling, planting, scrub growth: localized/widespread)

**Sub-Surface Problems** (e.g. rabbits, badgers, subsidence: localized/widespread)

| <b>Damage Sustained</b> |               |                 |               |                    |               | <b>Observations</b> |
|-------------------------|---------------|-----------------|---------------|--------------------|---------------|---------------------|
| <b>Past</b>             |               | <b>Recent</b>   |               | <b>Future Risk</b> |               |                     |
| <b>Category</b>         | <b>Extent</b> | <b>Category</b> | <b>Extent</b> | <b>Category</b>    | <b>Extent</b> |                     |
| _____                   | _____         | _____           | _____         | _____              | _____         |                     |
| _____                   | _____         | _____           | _____         | _____              | _____         |                     |
| _____                   | _____         | _____           | _____         | _____              | _____         |                     |

|                    |                        |
|--------------------|------------------------|
| <b>Photographs</b> | <b>Recommendations</b> |
|--------------------|------------------------|

|                     |                                |
|---------------------|--------------------------------|
| <b>Map Evidence</b> | <b>Last Visit</b>              |
| 1st Ed              | Date of last visit             |
| 2nd Ed              | Deteriorated since last visit? |
| 3rd Ed              |                                |

|                 |                 |
|-----------------|-----------------|
| <b>Recorder</b> | <b>Date</b> / / |
|-----------------|-----------------|





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