Condition and Management Survey of the Archaeological Resource in Northern ireland (CAMSAR)

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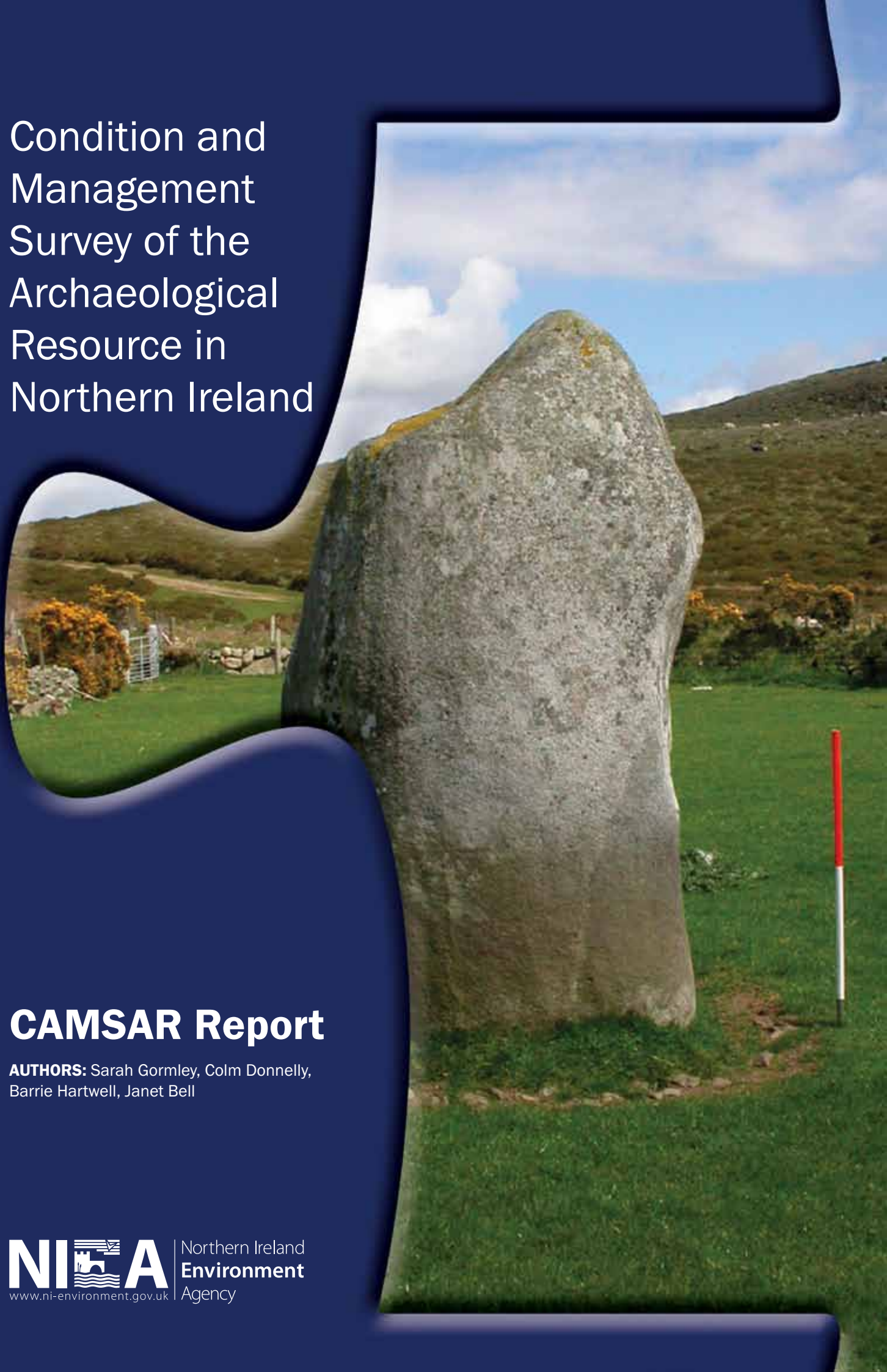

CAMSAR Report

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NIEA Northern Ireland Environment Agency
www.ni-environment.gov.uk

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

BUILT HERITAGE

CAMSAR: A Condition and Management Survey of the
Archaeological Resource in Northern Ireland

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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

The CAMSAR project was commissioned by Claire Foley, Senior Inspector, Built Heritage, then Environment and Heritage Service, now the Northern Ireland Environment Agency. The project was undertaken by the Centre for Archaeological Fieldwork, School of Geography, Archaeology and Palaeoecology, Queen's University Belfast, under the management of Dr Colm Donnelly and Barrie Hartwell, with Sarah Gormley and Janet Bell responsible for the data collection and fieldwork, and Sarah Gormley completing the analysis of the results.

The CAMSAR survey would not have been possible without the kind assistance of the many landowners who facilitated its fieldworkers in accessing their monuments. Thanks are due in particular to Douglas and Laura Graham, and to Thomas Noble who generously facilitated access to island sites on their land. Access to the Isle of Muck was made possible by Andrew Upton of the Ulster Wildlife Trust who took fieldworkers by boat to the island.

The project owes a great debt to Rhonda Robinson, NIEA, who answered many queries and provided much help with regard to the workings of the agri-environment schemes in Northern Ireland. Maybelline Gormley and Grace Hassard, also of NIEA, generously helped with queries, especially during fieldwork. Thanks are also extended to Dr B.G. Scott for his work on editing the text of this report and for much useful discussion. Thanks to Claire Foley and Dr John O'Keeffe from NIEA who have contributed to the project in many ways, especially in the reading of the final text. A special thanks to Edith Gowdy for her help with the final draft.

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 earier pilot survey undertaken between 2001 and 2002[1].

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

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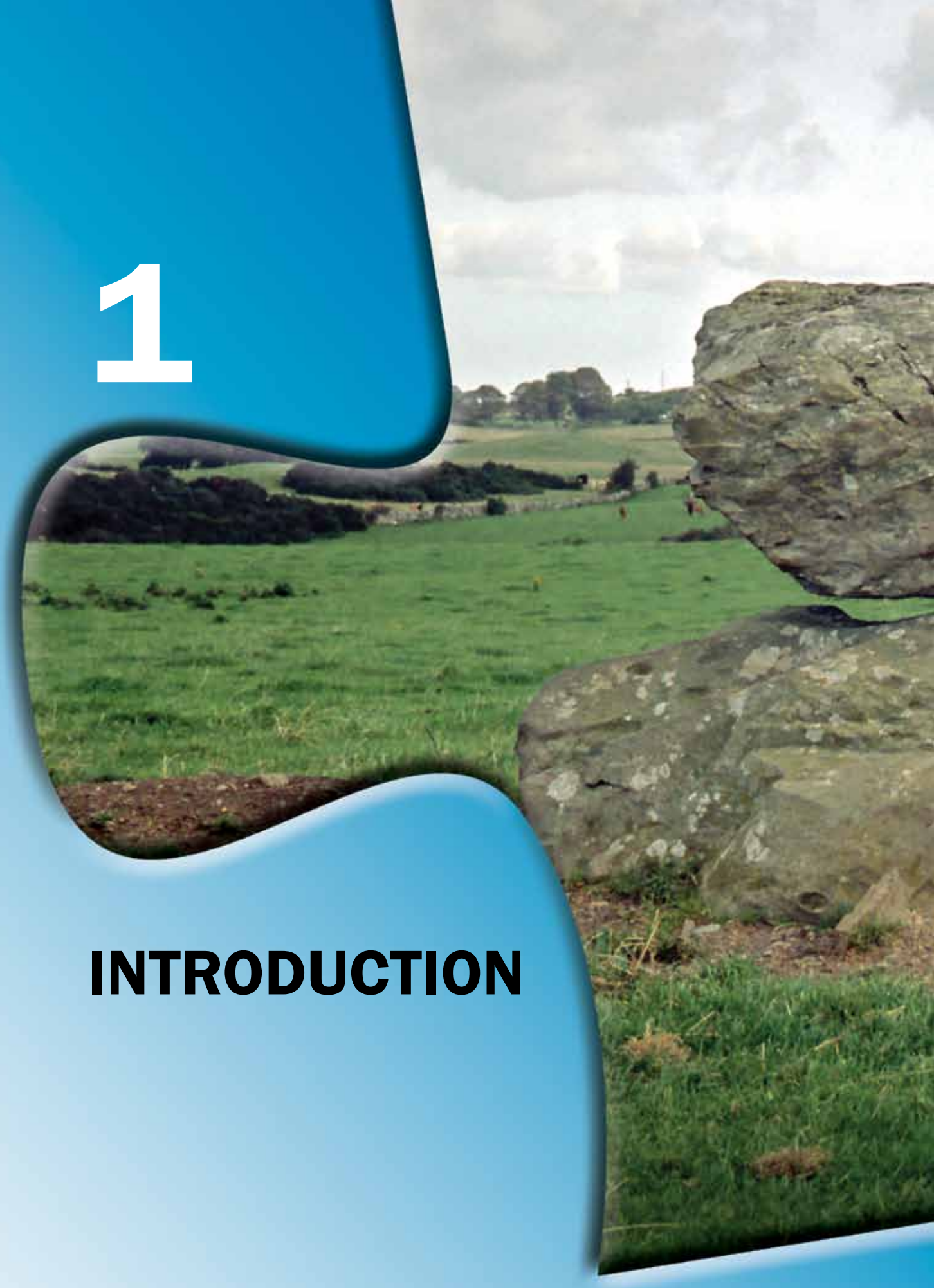

INTRODUCTION

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[2] 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

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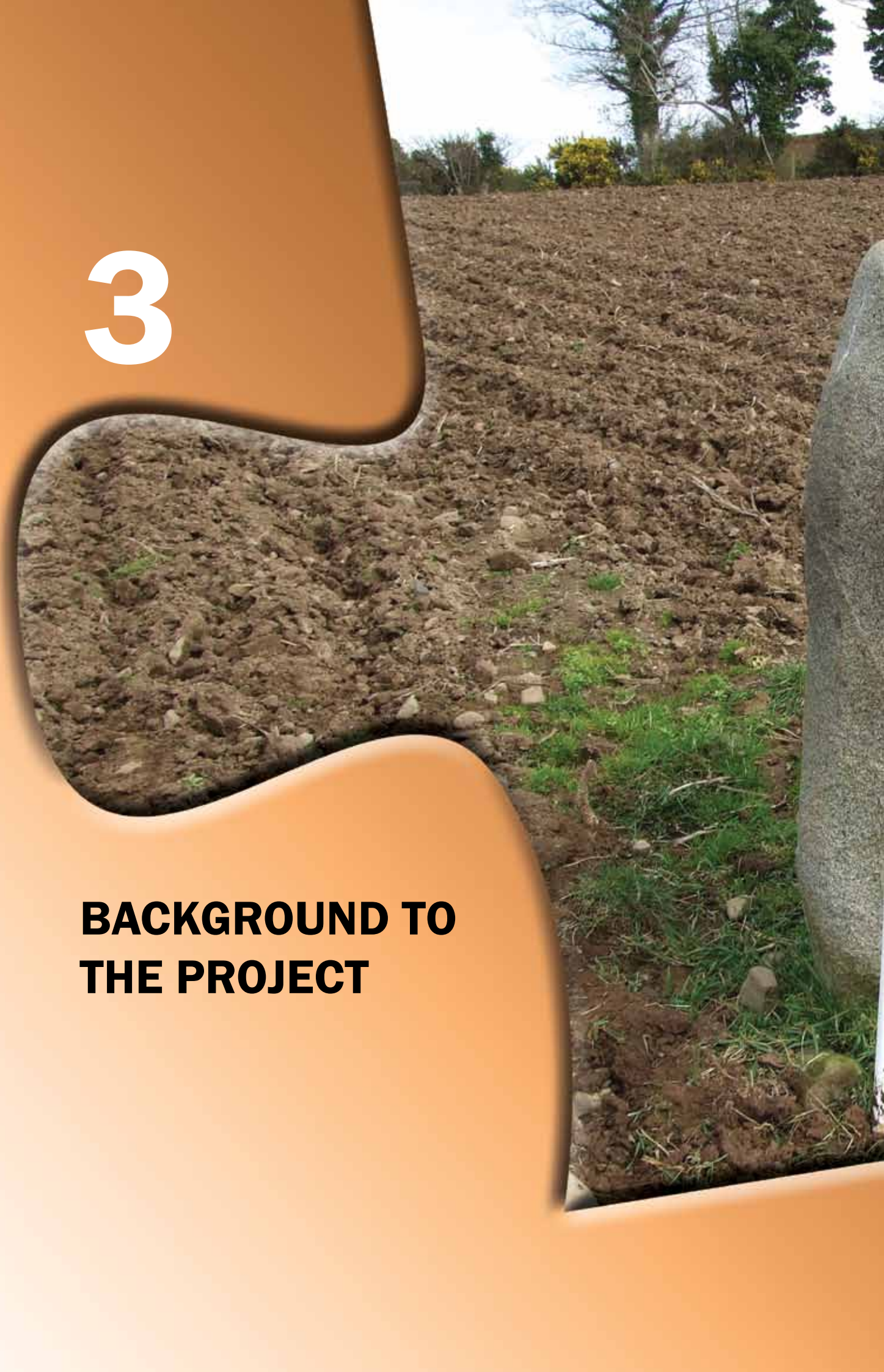

BACKGROUND TO THE PROJECT

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'[3]. 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"[4]. 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"[5].

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[6], and destruction rates of individual monument types have been published[7]. 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[8]. 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[9].

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[10].

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[11]. 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[12].

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[13] 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[14]. 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[15]. 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)[16]. It was found that 16% of monuments had been wholly destroyed prior to 1995, with about half of this destruction having occurred since 1945[17]. 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[18].

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[19]. 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[20]. Of the 892 visited, it was found that 8% had been destroyed since the completion of the county archaeological inventories[21]. Land improvement had caused the greatest issue with archaeological monuments, and was cited in over 50% of cases of damage or destruction[22].

The results obtained from the *AFAR* project confirmed that archaeological sites and monuments in Ireland are under considerable threat[23]. 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[24]. 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[25].

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[26]. 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[27]. 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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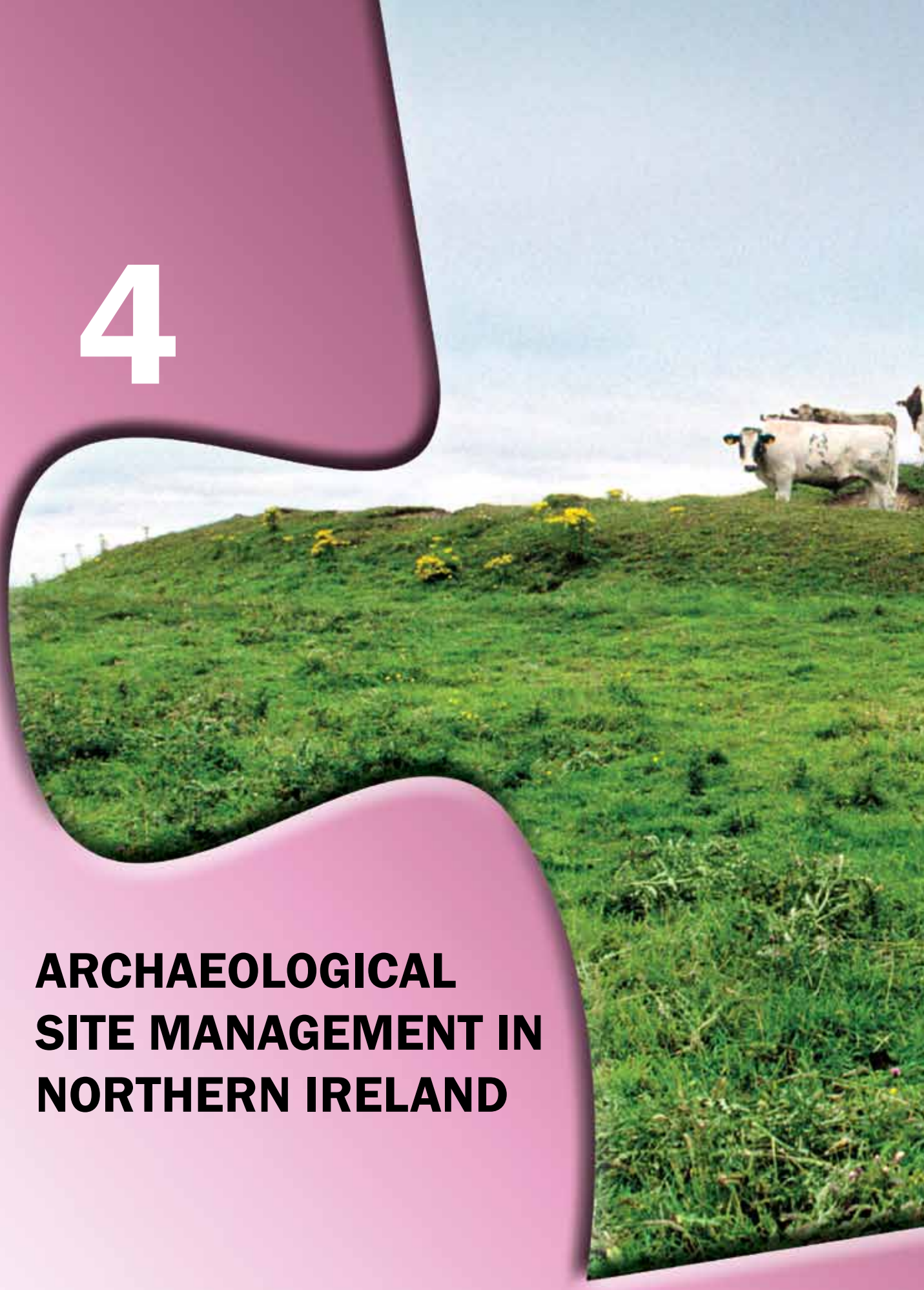


ARCHAEOLOGICAL SITE MANAGEMENT IN NORTHERN IRELAND

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[28]. 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, 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[29]. 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[30]. 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[31]. 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[32]. The reforms of CAP have taken place under Agenda 2000, which aims to move policy away from price-support and towards integrated rural policies[33]. 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[34].

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[35]. 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[36]. 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[37]. 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[38]. 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[39]. 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”[40]. 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[41]. 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[42].

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[43]. 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[44]. 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.

References

28 Data correct as of 2007
29 Brannon 2002, 493
30 DARD 2006, 31
31 Foley 2002, 118
32 *ibid*.
33 Fairclough 2002, 7
34 Foley 2002, 120
35 Middleton 2002, 16
36 *ibid*.
37 DARD, *Agri-environment Scheme Explanatory Booklet,* 2
38 DARD 2006, 65
39 DARD,
40 Forest Service 2004, 5
41 Forest Service 1993, 19
42 Forestry Service, *Environmental Guidelines for Timber Harvesting,* 7
43 Forestry Commission 1995
44 Forest Commission 1995, 4

5

METHODOLOGY

5 METHODOLOGY

5.1 SITE SELECTION

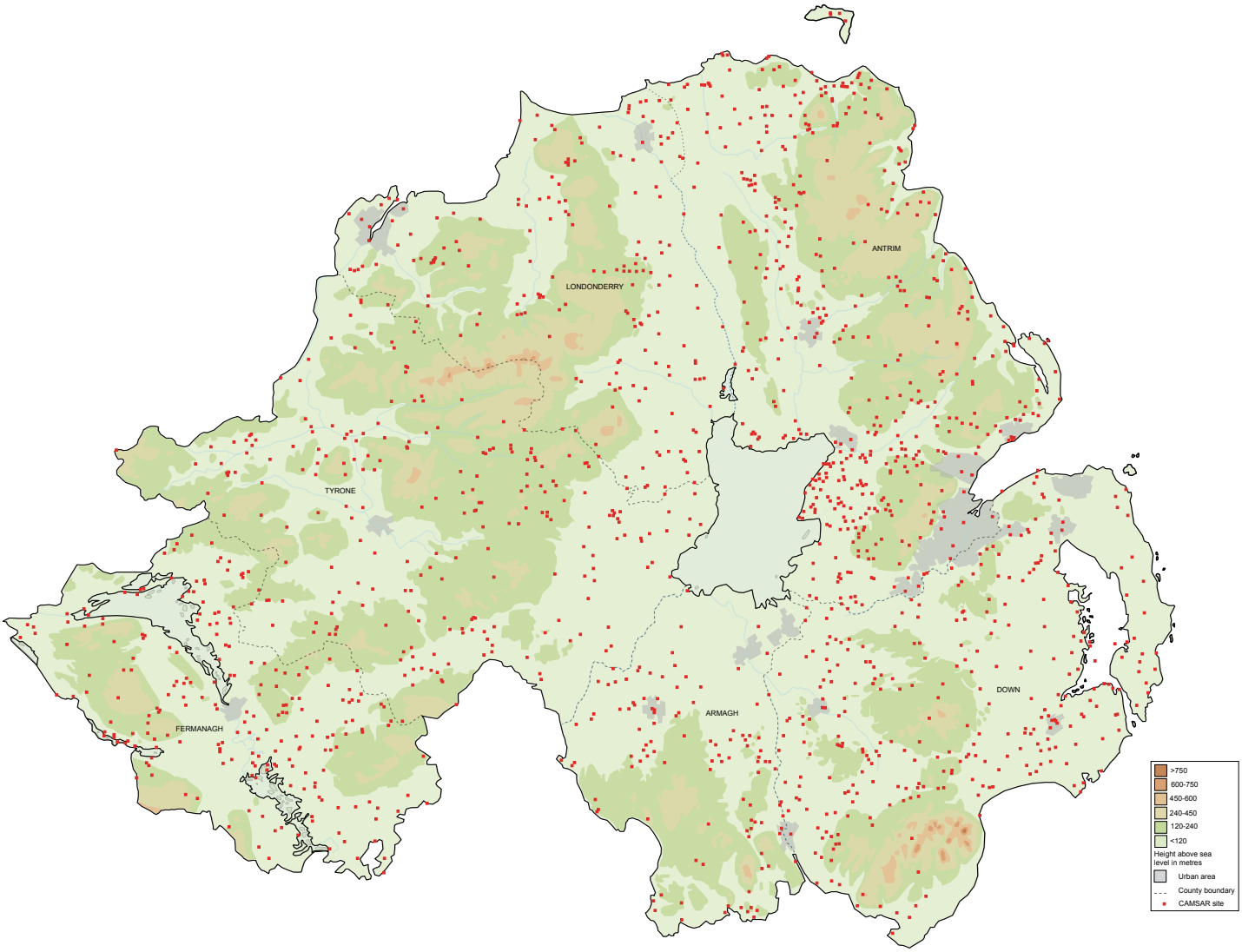


Figure 1 Map of Northern Ireland indicating the location of sites included in this CAMSAR study.

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

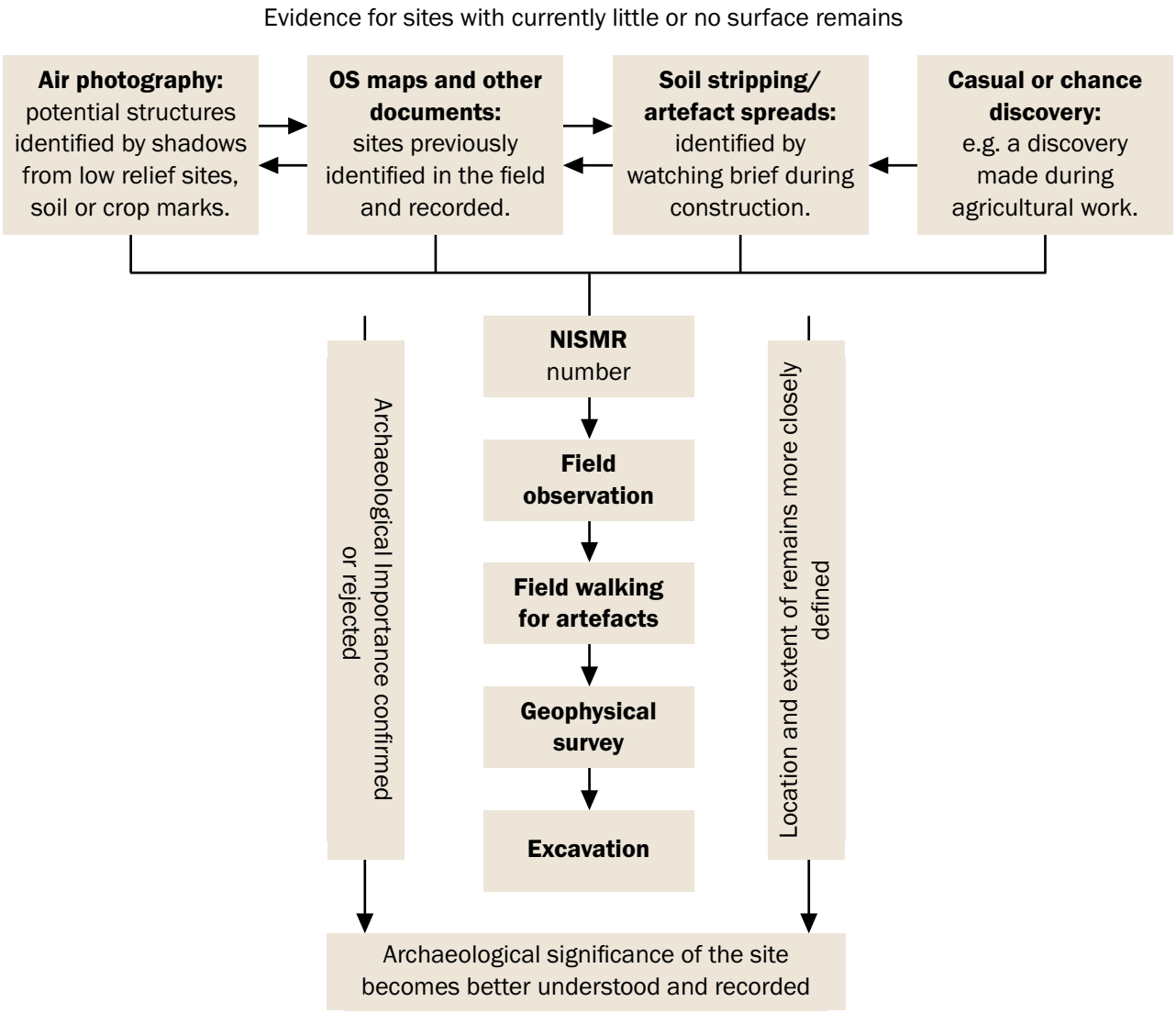
There are regional variations in the percentages of sites with no visible remains, and this often reflects regional differences in the distribution of certain types of monuments. For example, while County Antrim has the greater percentage of sites that are not presently visible above ground (58%), that 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[45]. 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[46]. 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
Total	**1500**	**1500**

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
Total	**1500**	**1500**

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
Total	**474**	**108**	**297**	**212**	**182**	**227**	**1500**	**100%**

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[47]. 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
Total	**474**	**108**	**297**	**212**	**182**	**227**	**1500**	**100%**

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 FERM 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/ burial mound	5	6	4	1	5	4	25	01.67
Masonry & carved stone & 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/ burial mound	1	0	0	0	0	0	1	00.07
Freshwater & masonry & 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
Total	**474**	**108**	**297**	**212**	**182**	**227**	**1500**	**100%**

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%).

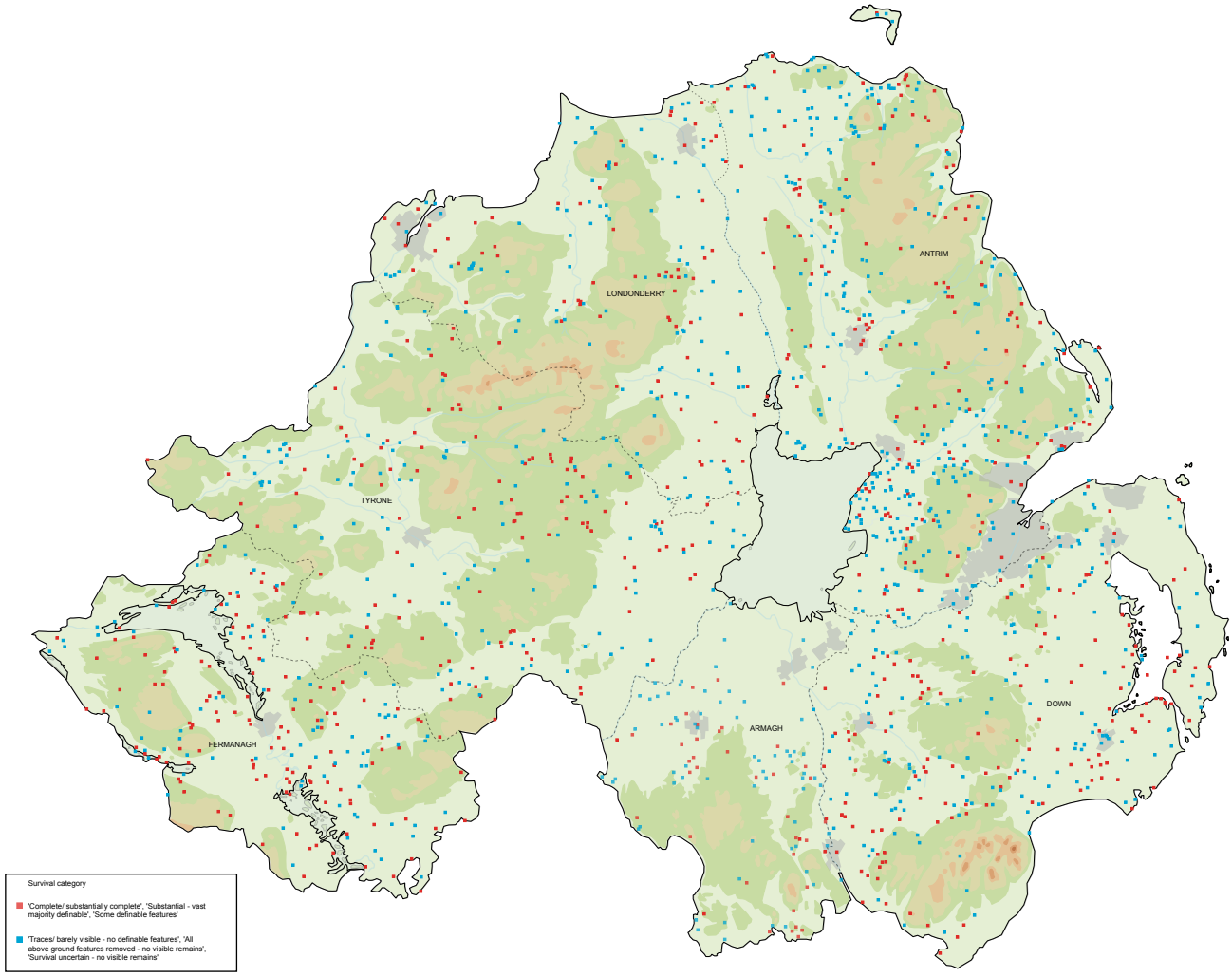
County Antrim has the highest percentage of monuments in the 'masonry' structural category, with 11.2%, while County Tyrone has the least at 4%. The four other counties have around 8% to 9% of their totals in this category. A small proportion of the total (21 sites) falls into the 'carved stone' category,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

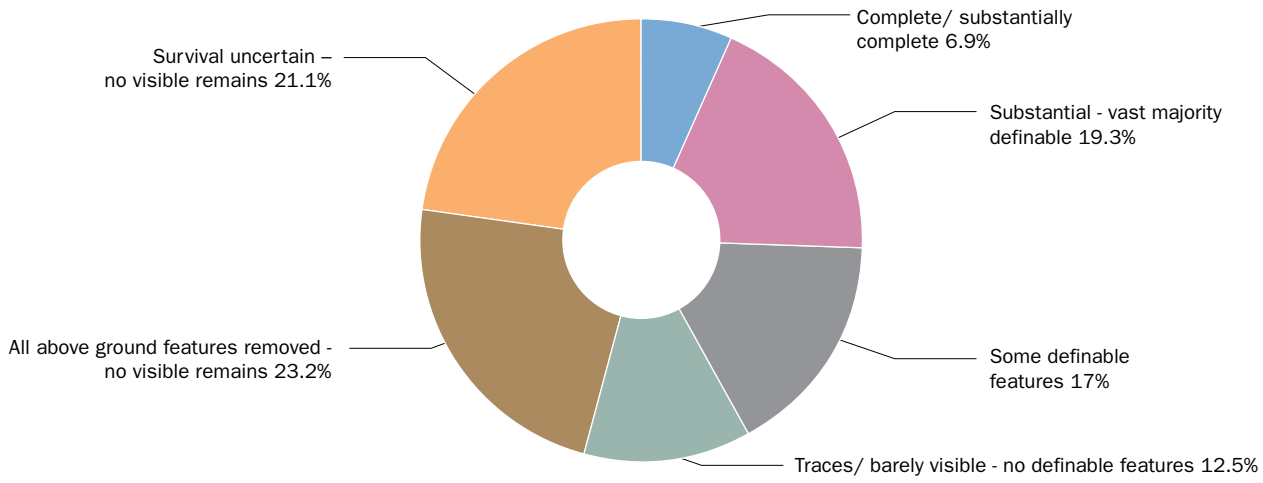


Table 10 Numbers and percentages of the total CAMSAR sample in each survival category

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
Total	**1500**	**100**

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
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

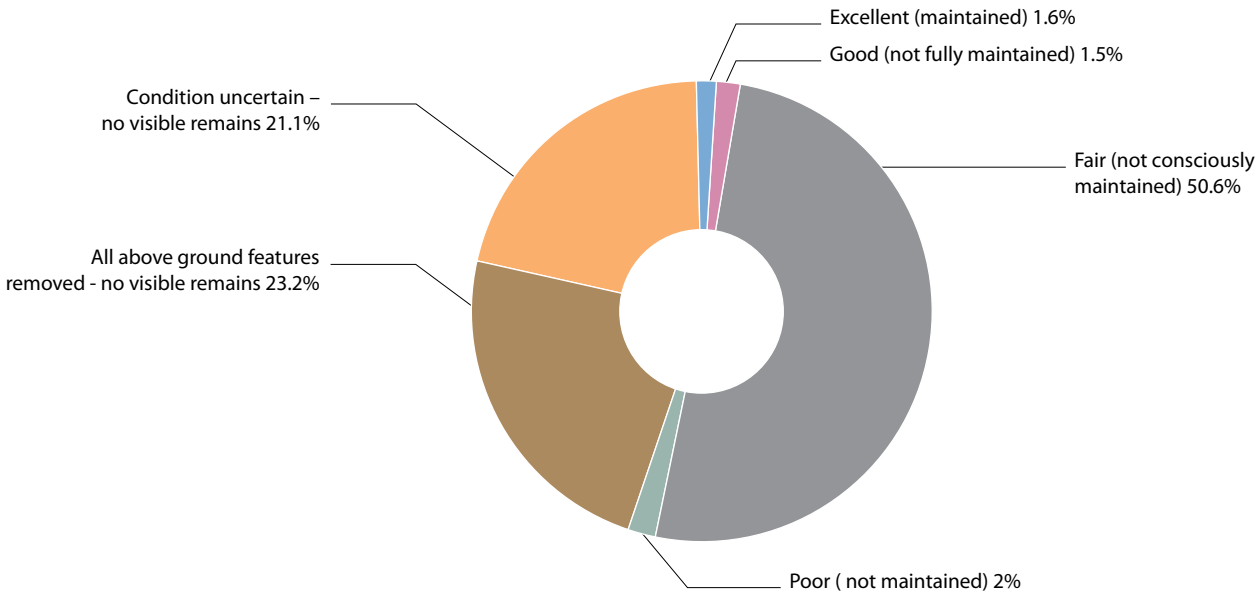
The fifth survival category is composed of sites that have had all of their above ground features removed. Sites such as these make up 23.2% (348) of the sample. They are sites which have suffered most as a result of adverse practices or deliberate destruction resulting in the complete removal of all 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
Total	**1500**	**100**

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[48].

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.

Plate 6 Sites recorded as being in poor condition (clockwise from top left). Drumman Rath (TYR 006:010) has been extensively quarried and is still actively eroding. At Ballymacarron Rath (DOW 024:013) archaeological layers are visible in the eroding profiles. Aghlisnafin Cashel (DOW 043: 009) has had its interior damaged by agricultural traffic and dumping. Lisdoo Rath (TYR 049 014) is eroding due to stock paths and livestock trampling.

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
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

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/ substantially complete	Substantial - vast majority definable	Some definable features	Traces/barely visible - no definable features	All above ground features removed - no visible remains	Survival uncertain - no visible remains	Total
Improved grassland	5.91	7.09	7.87	17.52	34.06	27.56	100.00
Unimproved 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 grassland, Boundaries	3.85	7.69	42.31	38.46	3.85	3.85	100.00
Improved grassland, Woodland	6.06	33.33	39.39	9.09	3.03	9.09	100.00
Unimproved grassland, 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/ substantially complete	Substantial - vast majority definable	visible - Some definable features	Traces/ barely features no definable features	All above ground Survival removed - no visible remains	uncertain - no visible 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, 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).

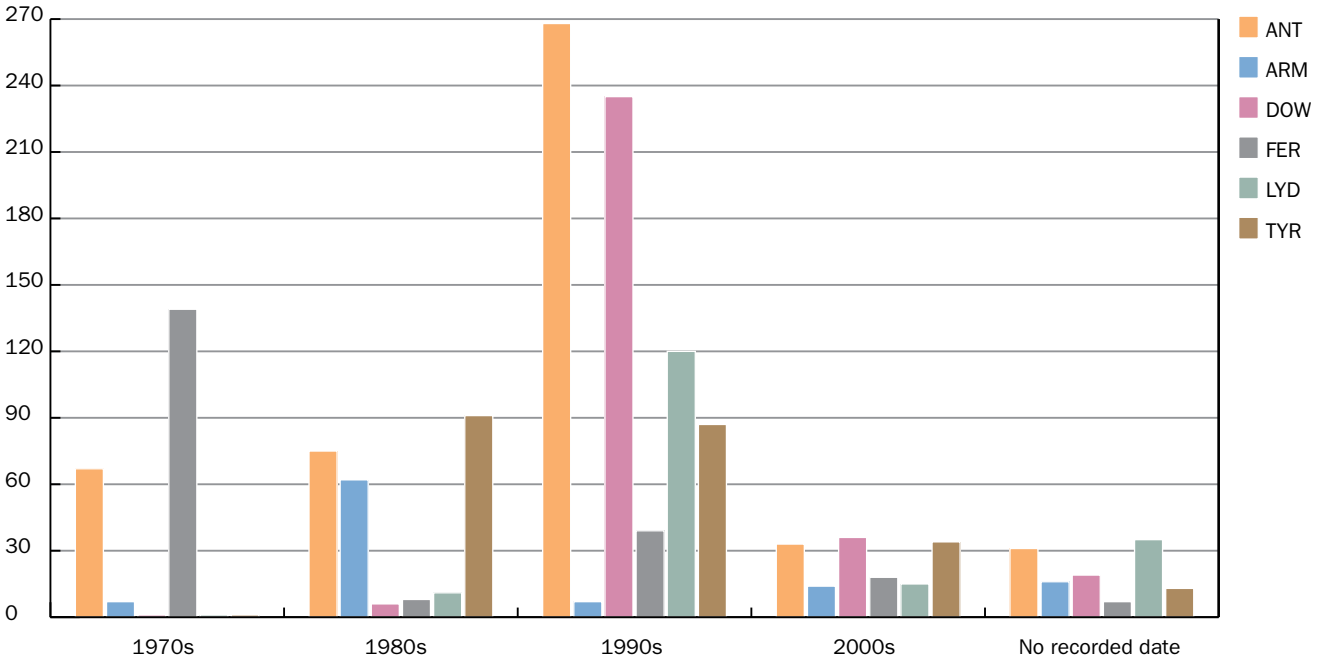


Table 18 Numbers of CAMSAR sample sites visited in each county by NIEA archaeologists and field monument wardens by decade.

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
Total	**474**	**108**	**297**	**212**	**182**	**227**

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.

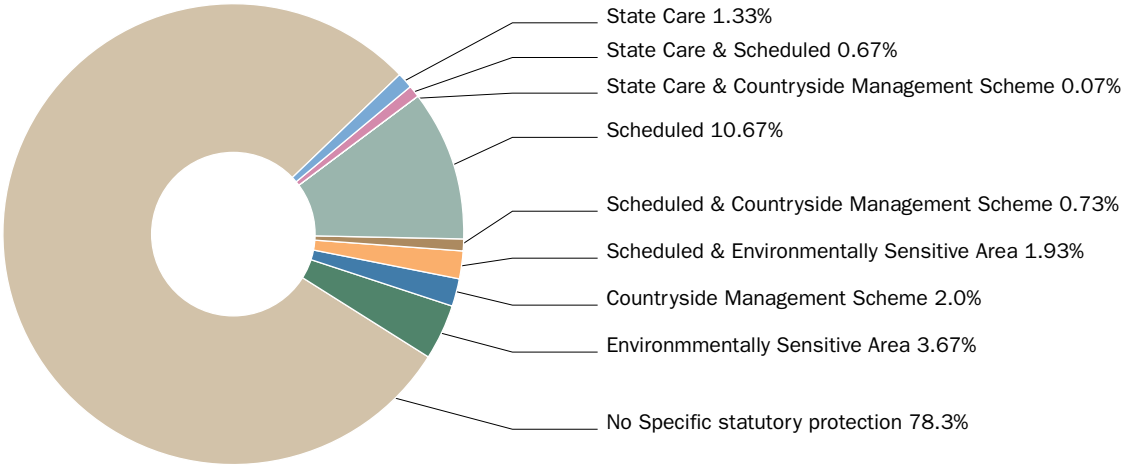
Table 19 Numbers of sites in each county that had deteriorated since they were last inspected.

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
Total	**474**	**108**	**182**	**297**	**212**	**227**	**1500**

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[49] 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
Total	**1500**	**100**

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
Total	**474**	**108**	**182**	**297**	**212**	**227**	**1500**

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.

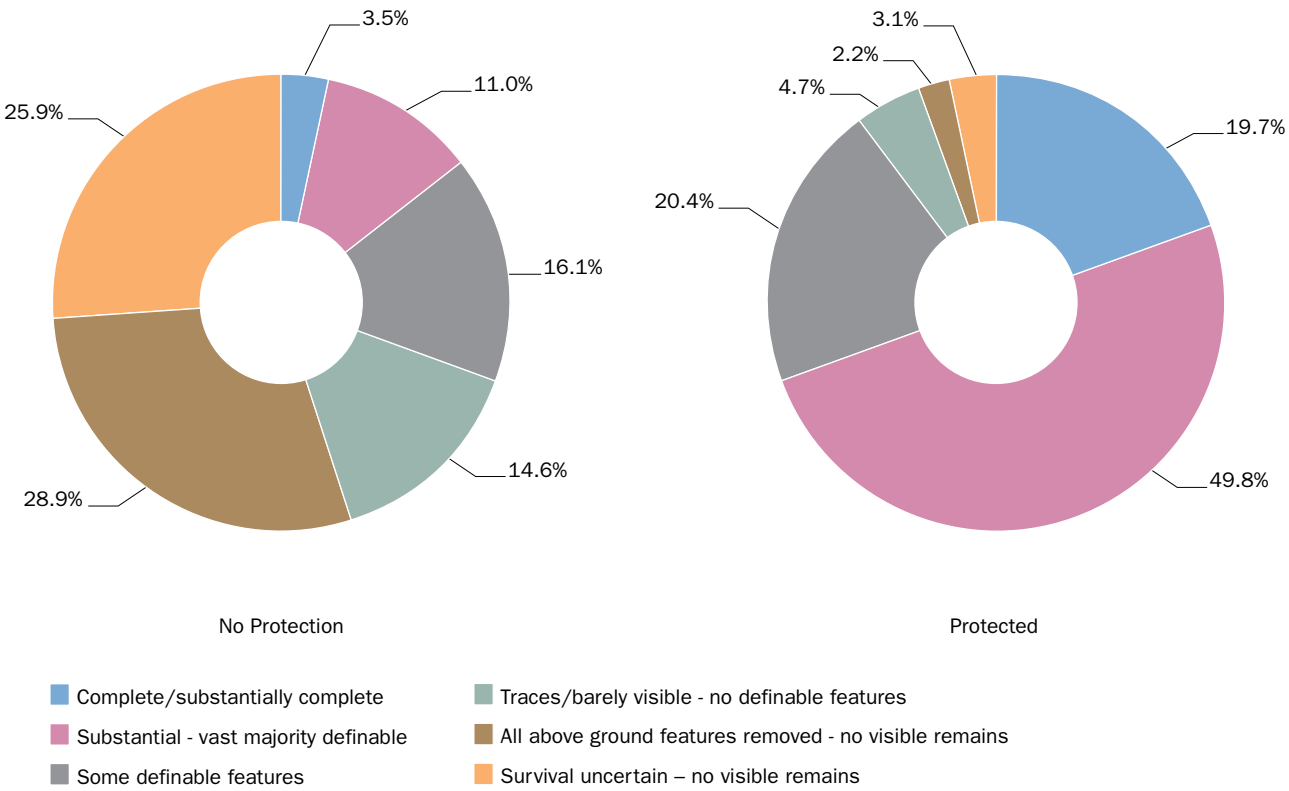


Table 22 The survival within the CAMSAR sample between unprotected and protected sites.

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
Total	**1181**	**319**	**100**	**100**

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.

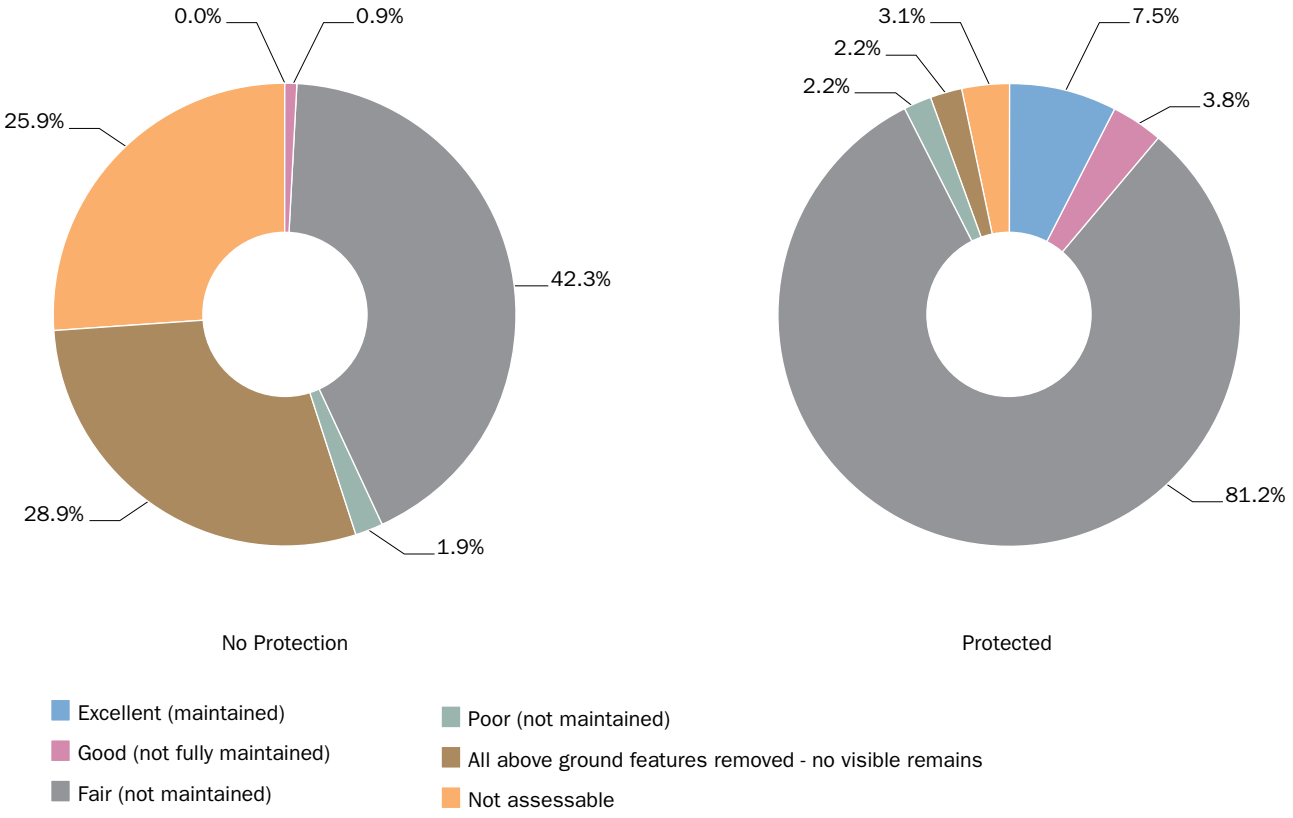


Table 23 Condition of protected and unprotected sites in the CAMSAR sample.

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
Total	**1181**	**319**	**100**	**100**

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
Total	**1181**	**20**	**1**	**10**	**160**	**88**	**40**	**1500**

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
Total	**1411**	**89**	**100**	**100**

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.

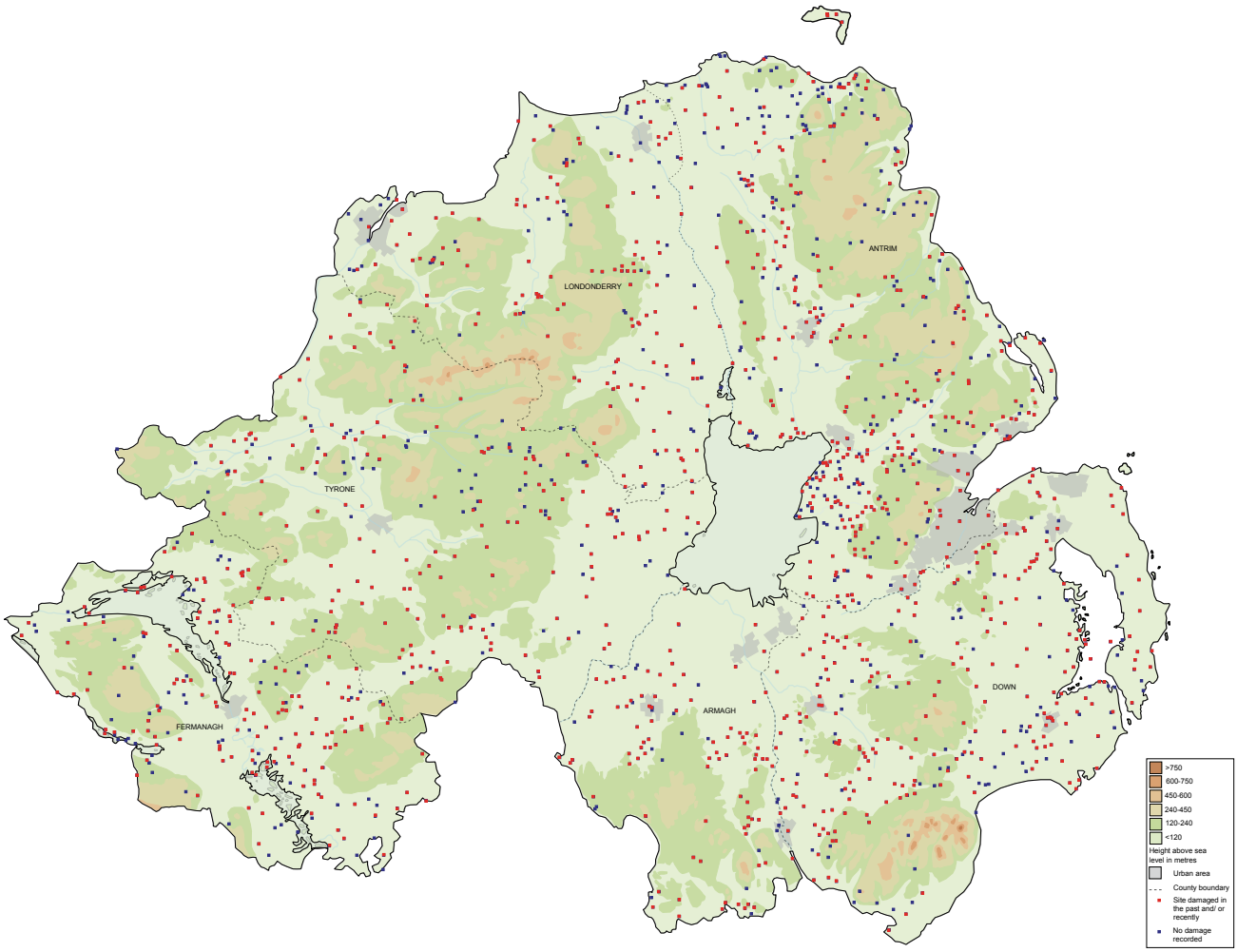


Table 27 shows the types of damage that had occurred in the past that were encountered during the survey and the number of instances recorded. The most frequent record was of 'removal', which accounted for just below 30% of sites visited. This may reflect the way in which the data were collected but 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.

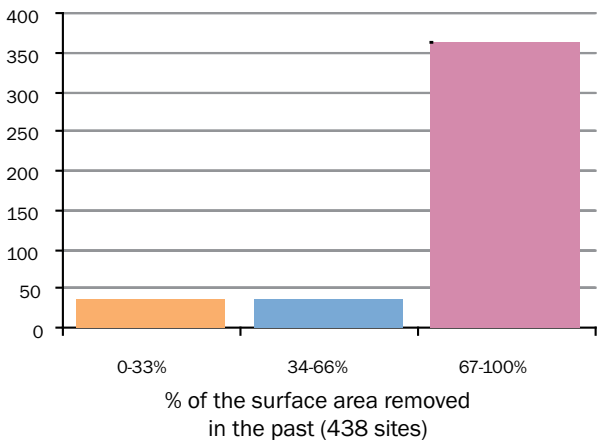
The percentage of the surface area of each monument which was damaged in the past varies considerably from localised removal of a part to total loss. Figure 11 shows the percentages of the surface area affected by 'removal' and 'building' in the past. There are 438 sites included in the 'removal' category,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

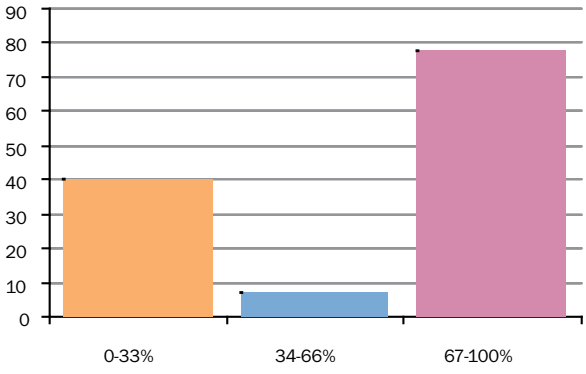
Past damage type	Instances	Past damage type	Instances
Removal	438	Wind, weather, time	13
Building	125	Dumping	7
Archaeological excavation*	83	Badgers	7
Cultivation	78	Collapse	6
Tree planting	56	Water troughs	5
Improvements/landscaping	37	Reclamation	4
Scrub encroachment	37	Visitors	4
Mineral extraction/quarrying	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.



% of the surface area removed in the past (438 sites)



% of the surface area built over in the past (125 sites)

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. Dundooan 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).

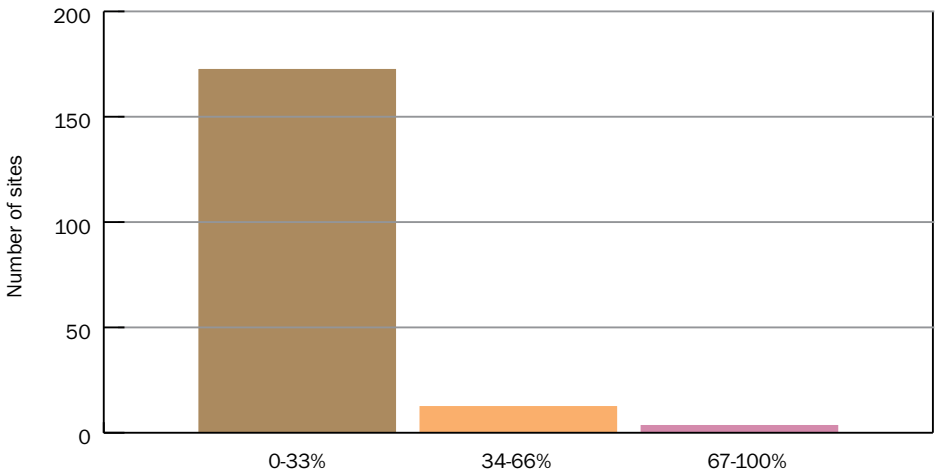


Figure 12 indicates the percentage of the surface area of each monument which has been affected by livestock damage. Of the 190 sites which have been damaged, 91% have had between 0% and 33% of the surface area of the monument affected. While livestock damage often affects proportionately less of the 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[50]. 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
Total	**319**	**150**	**47**

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[51].

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.

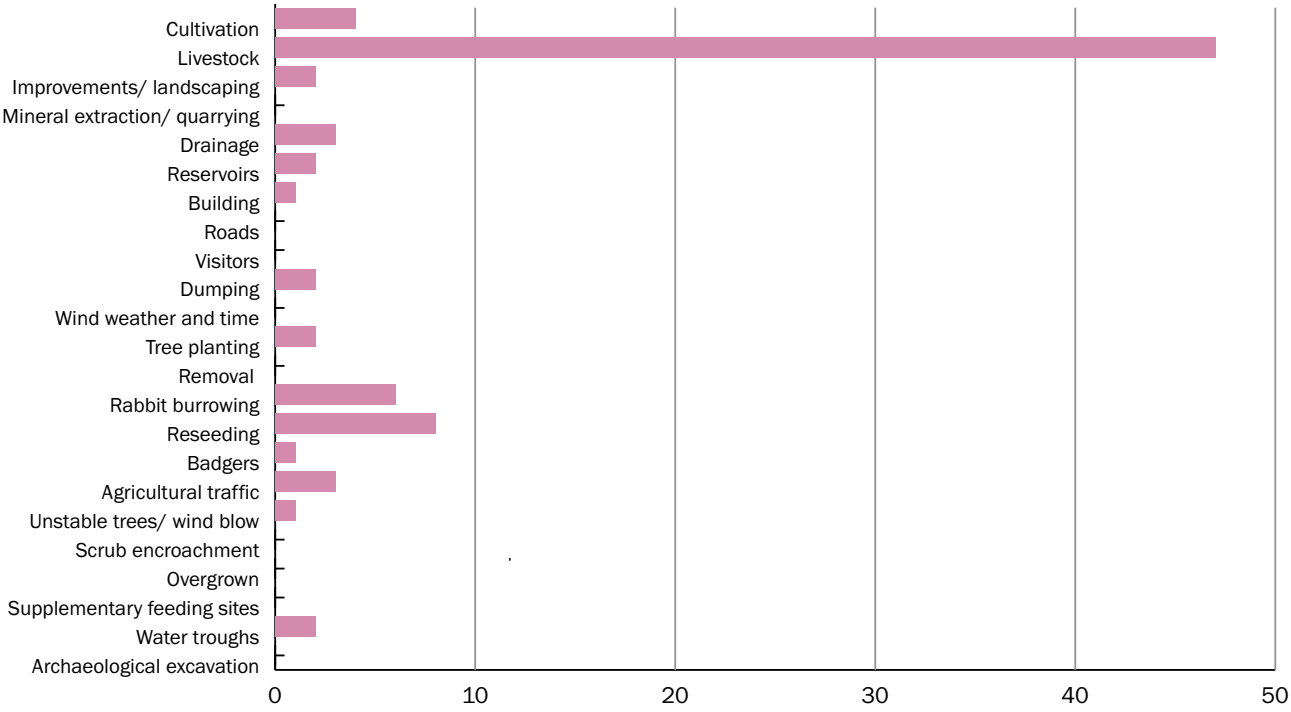
High percentages of sites on land in the 'improved grassland and woodland' (64%) and 'unimproved grassland and woodland' (75%) categories have however been damaged in recent years, and it is evident that where there are multiple land uses at a site the archaeological remains are at greater risk. These 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).

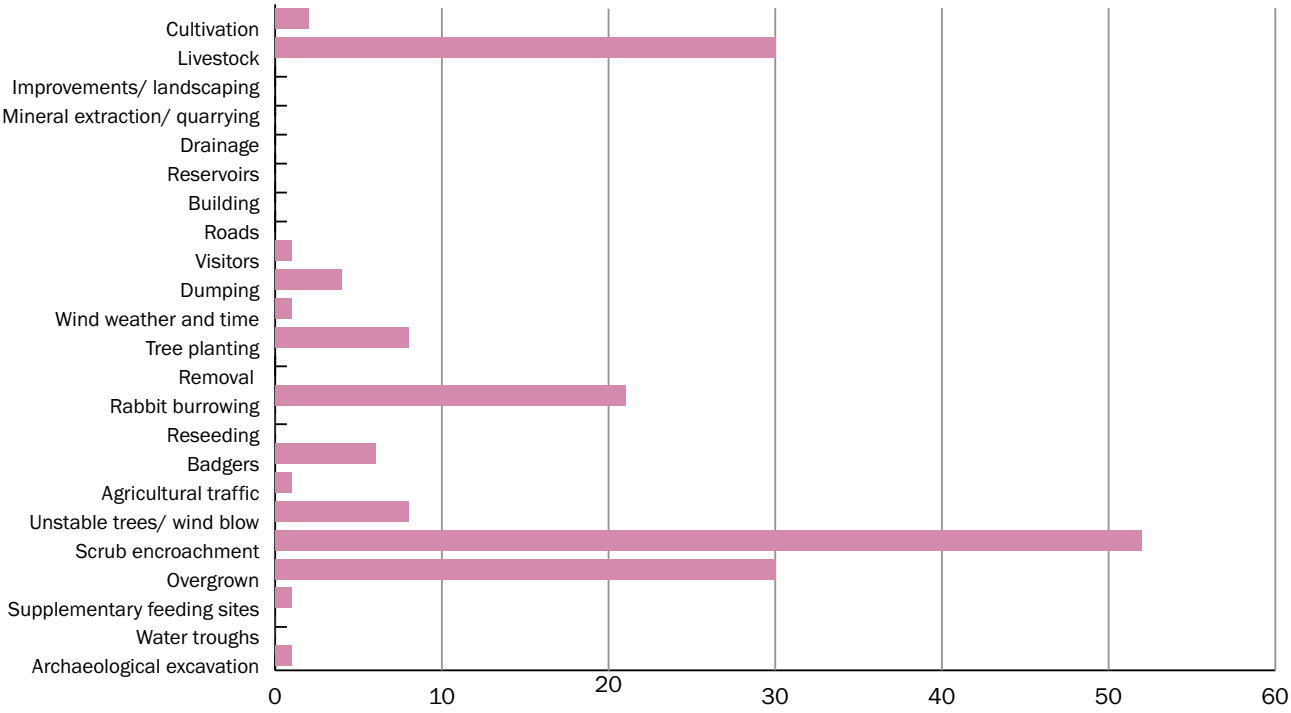
Land use category	% of sites in each category which have been damaged in recent years
Improved grassland	14
Unimproved grassland	36
Arable	40
Wetland	16
Development	11
Boundaries	19
Woodland	58
Improved grassland, boundaries	46
Improved grassland, woodland	64
Unimproved grassland, woodland	75

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

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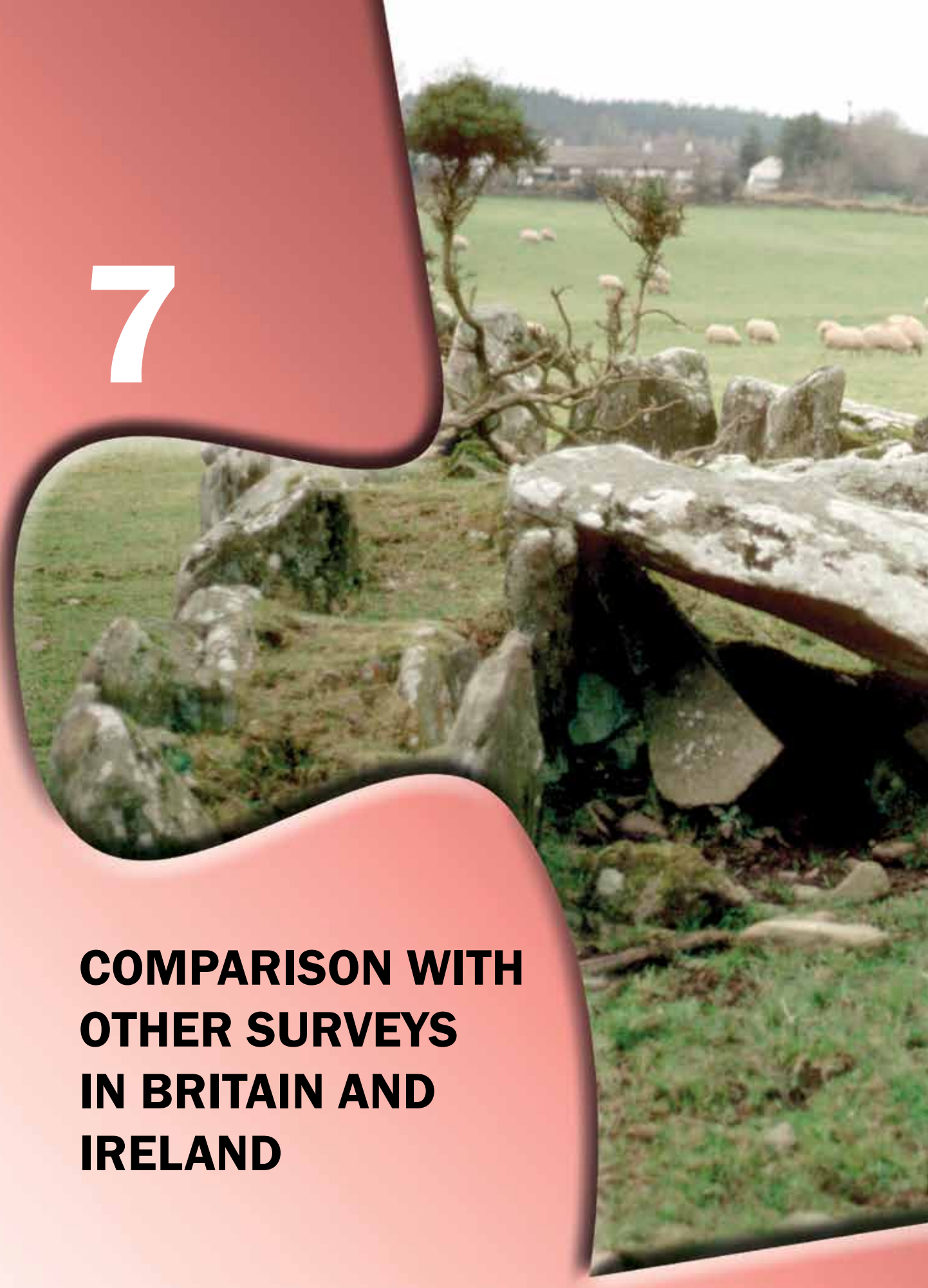
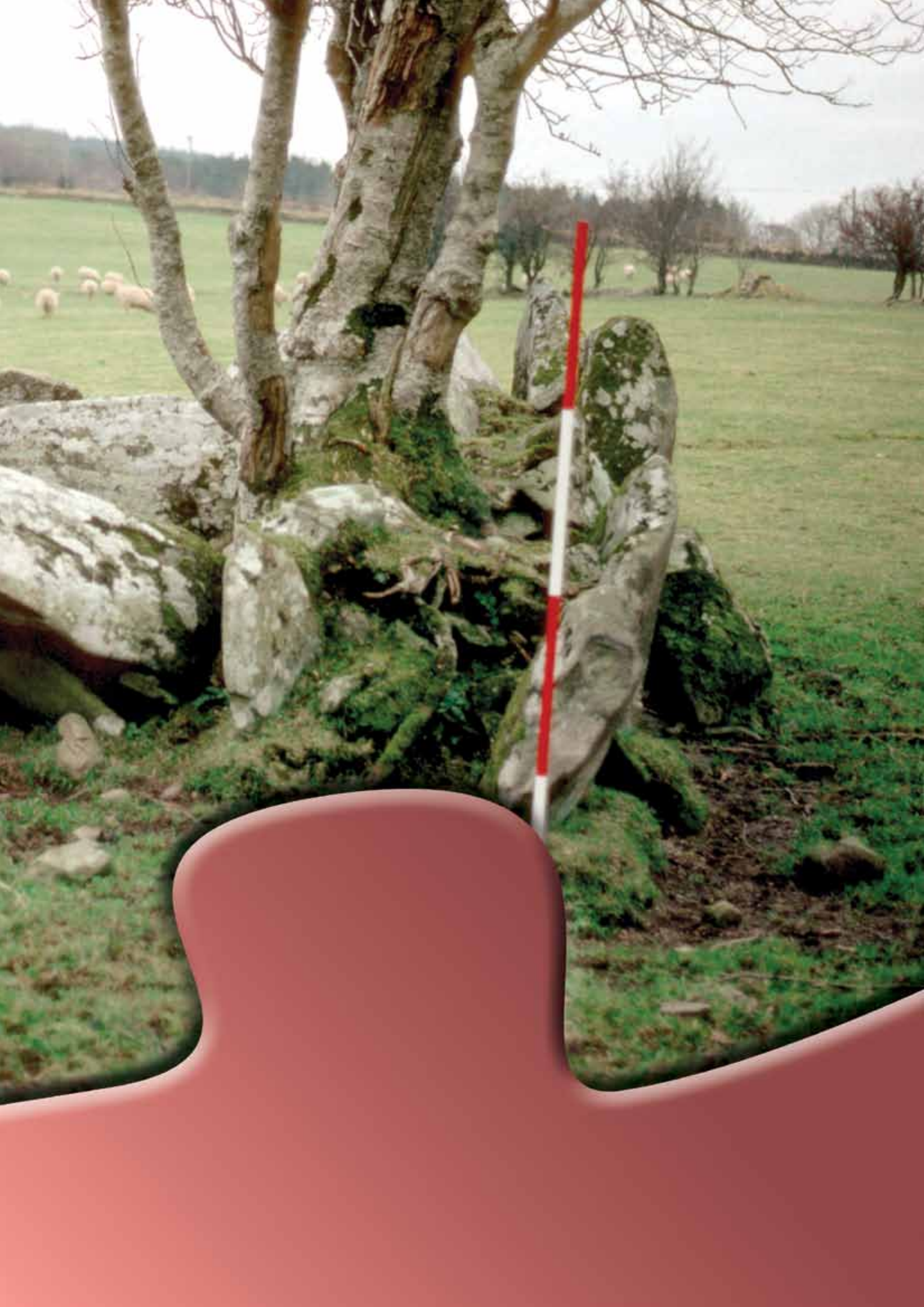


COMPARISON WITH OTHER SURVEYS IN BRITAIN AND IRELAND



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[52]. 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[53]. 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[54]. 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[55].

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[56]. 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[57], and land improvements are listed as the greatest cause of this change affecting 55% of those damaged, with 10% affected by development[58].

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.

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52 Darvill and Fulton 1998, 239
53 *ibid*. 239
53 *ibid*. 2395
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55 O'Sullivan et al. 2001, 35
56 0Darvill 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[59]. 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[60]. 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[61].

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[62]. 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[63]. 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[64]. 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[65]. 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[66]. 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[67.] 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[68]. 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)[69]. 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[70]. 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[71]. 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[72].

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[73]. 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[74]. 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[75]. 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.

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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 (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/doon: 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 bailey: doon
ANT 005:008	D17174228	Cross	Church and graveyard: Killylyenan
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, 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/ Anderson, Bushmills	Standing stone
ANT 007:087	C940406	Bushmills Or Magheraboy, 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	Coolkenny	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

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	Ballyvennaght	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	Ballyvennaght	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	Ballyvennaght	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	Carnkirn	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

ANT 015:082	D23633132	Drumnasmear	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, 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, Glenariff Mountain Lower	Cairn
ANT 020:006	D22652361	Kilmore	Graveyard
ANT 020:009	D22632623	Knockans South, 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	Moneycanon	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	Lisnasoo	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?: 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

ANT 025:024	D237220	Clonreagh and Greenaghan – 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	Garvaghy	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

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, 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, Larne	Fortifications
ANT 040:040	D41330165	Curran and Drumaliss, 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

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	Ballynaleney	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

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

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	Carnaghliss	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

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	Carnaghliss	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 urban excavation 18th 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	Ballyellough	Motte and bailey
ANT 063:046	J16736673	Loughrelisk	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

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	Maghery	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: Loughgall; Levallieglish
ARM 008:014	H87055094	Grange Blundel	Rath: Moores Island
ARM 008:023	H88825025	Moneycree	Church and graveyard (site of): Killoter, 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 with annex
ARM 009:007	J00355175	Maghon – SMR brick structure is 19th century	Church (site of) and holy well: Maghon Well or St Patrick's Well
ARM 009:028	H92515032	Creenagh	Aerial photo site: circular enclosure
ARM 010:015	J04625432	Lisnamintry	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, 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

ARM 012:039	H91414478	Tirnascobe	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	Rockmacreeny	Rath: Rockmacreeny 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	Maghnavery	Rath
ARM 017:034	H97084012	Gosford Demesne	Rath: Crunaght Fort
ARM 017:038	H96603760	Kilbracks	Church (site of), graveyard and holy well: 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	Lisnagree	Rath
ARM 022:017	J07103110	Goragh	Linear earthwork: The Danes Cast (part of) 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

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,- passagetTomb?: 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), 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, 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	Holywood	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: 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	Scrabo	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

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 two phases – 1760 and 1810	Former market house, later court house: 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	Creevy	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): WIndmill Hill
DOW 017:021	J51786141	Killinakin – SMR – two gravestones dated 1782 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

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 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, Tullymacnous	Crannog
DOW 024:029	J52125254	Corporation (Killyleagh)	Rath
DOW 024:033	J58625447	Ardquin	Church, graveyard and cross slab
DOW 024:035	J54745384	Dunnyneill 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): 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, oldest gravestone 1697	Church (listed) and graveyard
DOW 027:076	J13354733	Ballymoney, Banbridge	Enclosure
DOW 027:087	J13854601	Tullylear, Banbridge	Enclosure - mass fort, Lisnaree

DOW 027:088	J13464596	Ballyvally, Tullylear, Banbridge	Enclosure
DOW 027:096	J18264987	Lisnaward	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	Garvaghy	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 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, Strangford	Tower: Old Court
DOW 032:005	J61215235	Derry	Two Early Christian churches: 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

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: Seafin Castle; mag
DOW 035:038	J29614460	Legananny	Round cairn
DOW 035:039	J23884119	Cloghskelt	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 graveyard and enclosure
DOW 037:010	J41574257	Dunnanew	Counterscarp rath
DOW 037:017	J44304333	Magheralagan	Crannog
DOW 037:019	J45604323	Hollymount	Enclosure - tree ring?
DOW 037:024	J47944346	Demesne Of Down, Downpatrick	Standing stone
DOW 037:033	J47564180	Quarter Cormick	Rath: Plunket's Fort
DOW 037:039	J46564001	Castleskreen	Rath and tower-house: Castleskreen 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, Downpatrick	Augustinian priory: Monasterium Hibernicorum, Mona
DOW 037:107	J487447	Demesne Of Down, Downpatrick	Fortifications: McCrory's Castle
DOW 037:108	J4844	Demesne Of Down, Downpatrick	Fortifications: Castle Derras
DOW 037:110	J48824435	Demesne Of Down, Downpatrick	Castle
DOW 037:112	J47984033	Demesne Of Down, 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 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

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: 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 with bullaun
DOW 045:015	J53093542	Kilbride	Church and graveyard (site of), with cross-carved stone
DOW 045:021	J56153710	Ardglass	Tower-house, merchants stores and 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: 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

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: Cloghadda
DOW 051:061	J15141959	Clonallan Glebe, Warrenpoint	Multiperiod church and graveyard: 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: 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

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	Drumadravy	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

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?

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, 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/ Gortatole	Crannog
FER 228:085	H15633953	Derrynim	Aerial photo: cropmark
FER 228:094	H10913588	Knocknalaffina	Stone Enclosure and Possible House 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, 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 (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

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	Cornabrass	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)

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 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	Soutterain
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	Rossnagalliagh	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	Dunnavenny	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	Lisnagroat	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	Brackaghlislea	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	Tullybrisland	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: 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?: 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 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 beaker settlement site
TYR 021:010	H75198758	Slaghtfreeden	Cairn
TYR 023:001	H19517713	Seegronan	Standing stone possibly remains of 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	Gortnacreagh	Standing stone
TYR 026:003	H44678112	Reaghan	Enclosure
TYR 026:006	H45588255	Eskeradooey	Rath
TYR 027:009	H54227691	Oxtown	Enclosure: Lisdoo
TYR 027:054	H60348034	Leaghan	Possible Megalithic tomb
TYR 027:058	H58267784	Loughmacrory	Cairn

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	Evishbrack	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

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, 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	Relaghdooey	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	Glengeen	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): 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

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

Land use - Site Specific On Site

Previous	Present	% Site	Comments
As noted in	See code	% of site	Any further information relating to the on-site land use
SMR	list	surface area	
		affected	

Land use - Site Specific Around Site

Previous	Present	Comments
As noted in	See code	Any further information relating to the around-site land use
SMR	list	

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

Remains	Is the site visible?	Archaeological Site?	Survival	Condition
See code lists	Y/N	Y/N/?	1 2 3 4 5 6	1 2 3 4 5 6

Comments (e.g. human interference and management)
Are the remains as described in the SMR, if they have changed, how? Note any changes in the remains here.

Surface Problems (e.g. ploughing, trampling, planting, scrub growth: localized/widespread)
Note any problems with the condition of the site here. This should be specific to the surface, such as livestock erosion.

Sub-Surface Problems (e.g. rabbits, badgers, subsidance: localized/widespread)
Note any problems with the sub-surface condition of the site here. This might be burrowing, for example.

Damage Sustained

Past		**Recent**		**Future Risk**		
Category	% Site	Category	% Site	Category	% Site	Observations
See code	% of site	See code	% of site	See code	% of site	Any further information relating to damage to the site
list	surface area	list	surface area	list	surface area	
	affected		affected		affected	

Notes
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.

Photographs

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.					

Map Evidence

1st Ed	2nd Ed	3rd Ed
Is the site present? If so, which map & what is recorded? Taken from SMR.		

Last Visit

Date	Deteriorated since last visit?
Date of last recorded visit. Taken from SMR.	Is is possible to tell from SMR if the site has deteriorated significantly since the last visit? If so, how has it deteriorated?

Recorder Field workers initials	**Date** 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

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

APPENDIX 4: STRUCTURAL CATEGORIES

Code and category	General monument type	Specific monument type
1. Orthostatic Monuments	Dolmen?	
	Embanked stone circle	
	Henge	
	Henge and Megalithic tomb	
	Megalithic tomb:	Alignment
		Cairn
		Cairn kerb
		Chambered tomb
		Cist burial
		Court tomb: centre court tomb, 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	
2. Piled stone structures	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 (?)
3. Earthworks	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 - / linear - / oval - / (sub-) rectangular
		Drainage feature
		Enclosure (?): double-ditched - / elliptical - / sub-rectangular
		Hillfort
		Linear banks
		Rath
		Ring ditch
		Soil marks
		Vegetation anomaly
4. Freshwater structures (waterlogged/wetland)	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	
5. Masonry structures	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	
6. Carved Stone	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	
7. Miscellaneous	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*
8. Burial/burial mound	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

Code	Is the site visible?
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

NISMR No.	**Grid Reference**		**Townland**	
Landuse Cat.	**Structural Cat.**	**Site Type**	**Protection**	**Altitude**

Field Boundaries (e.g. contemporary/intrusive later/owners attitude towards monument i.e. dis/regard)

Site description/notes

Landuse

On Site			Around Site		Comments
Previous	Present	% site	Previous	Present	

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

Remains	Is the site visible? 1 2 3 4	Archaeological site? Y/N/?	Survival 1 2 3 4 5 6	Condition 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, subsidance: localized/widespread)

Damage Sustained

Past		**Recent**		**Future Risk**		
Category	Extent	Category	Extent	Category	Extent	Observations

Photographs	**Recommendations**

Map Evidence			**Last Visit**
1st Ed	2nd Ed	3rd Ed	Date of last visit Deteriorated since last visit?

Recorder	**Date** / /

The Built Heritage Directorate of the Northern Ireland Environment Agency maintains an extensive archive of information in its Monuments and Buildings Record, which is available for consultation during normal office hours at Waterman House, 5-33 Hill Street, Belfast, BT1 2LA. This archive includes information on archaeological sites and monuments, historic buildings, parks, gardens and demesnes of special historical interest, defence heritage and battlefields, and maritime heritage. Much of this archive is also available on-line at www.ni-environment.gov.uk. For further information, please contact (028) 9054 3159 or by e-mail at hmenquiries@doeni.gov.uk.

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