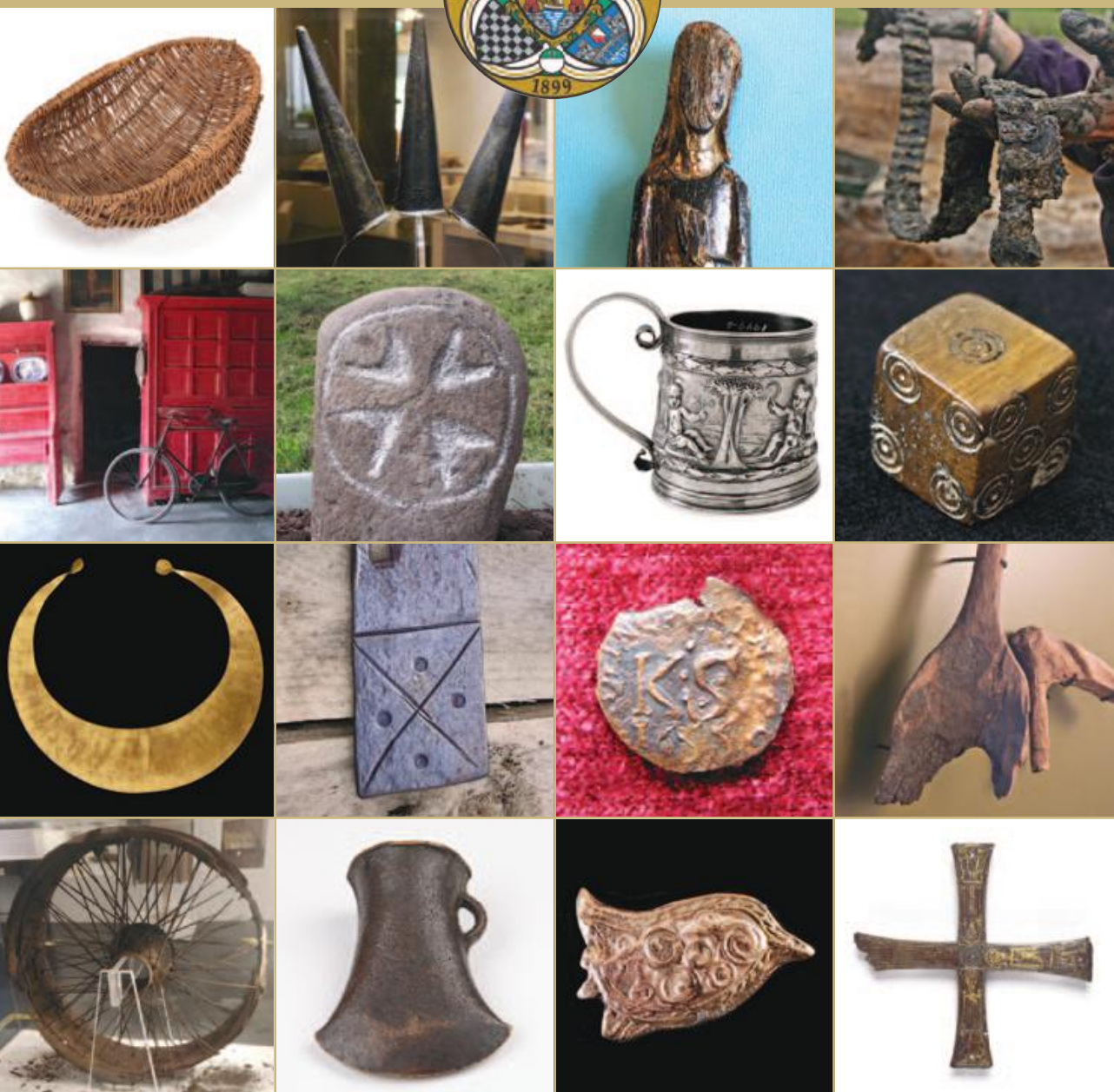
HERITAGE ARTEFACTS

of County Cork



HERITAGE ARTEFACTS

of County Cork

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Contents

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Message from **Cllr. Gillian Coughlan**, Mayor of the County of Cork and **Tim Lucey**, Chief Executive, Cork County Council

Cllr. Gillian Coughlan
Mayor of the County of Cork

Tim Lucey
Chief Executive, Cork County Council

'People have been living in the area we now call County Cork for millennia and in all that time the passing generations left a little of themselves behind for us to discover, appreciate and understand today'.

The very first line of this publication, as quoted above, immediately gives the reader a sense of the wonder to be found within these pages. This is a publication which delves deep into the fascinating history, and indeed prehistory, of the millions who, across the Ages, have called County Cork their home. What we take with us on a journey is met with interest, but what we take from our journey into the past, by focusing on what was left behind, is all the more fascinating.

From polished stone axes that date to the Neolithic to the most majestic pieces of Medieval metalwork, the objects that have been discovered and in instances, handed down, combine to paint a greater picture of who we are today, based on where we have come from. This publication is full of fascinating examples of artefacts, from the everyday to the extraordinary.

As per previous titles in the Heritage of County Cork publication series, there is a section on sites to visit featured towards the end of the book. This selection includes many of the museums and heritage centres of County Cork where wonderful heritage objects and artefacts can be seen first-hand. It is with thanks to these museums and heritage centres that these objects are cared for and made available for everyone to observe and enjoy.

This publication, the Heritage Artefacts of County Cork, is the ninth release in the Heritage of County Cork publication series; a series which has been supported by the Heritage Council since its inception and one that is highly regarded. We commended all involved in creating this publication and are confident that this series will continue to convey to more and more people, the wonderful heritage to be found across County Cork.

Preamble and Acknowledgements

This publication is an action of the County Cork Heritage Plan, which has gratefully received funding from the Heritage Council and through the heritage budget of Cork County Council. For more information on the effortless work and support of the Heritage Council, visit www.heritagecouncil.ie.

The Heritage Unit of Cork County Council wishes to thank a number of people who were instrumental to this publication. First and foremost is author Denis Power, who has written an exemplary text that spans generations of life in the county of Cork as told through the artefacts left behind, also having penned a number of drawings to illustrate this past. Denis' knowledge of the subject matter has made this publication what it is – a resource that will be drawn on by many, at home and abroad, in relation to the heritage of County Cork. Additional text, images and overall editing was carried out by Cork County Council's Heritage Unit (Mary Sleeman, Mona Hallinan and Conor Nelligan, with special thank you also to Emma Moir and Rachel O'Callaghan).

The project process from commencement to completion was managed by County Heritage Officer and Commemorations Coordinator, Conor Nelligan and County Archaeologist Mary Sleeman with the backing and support of Tom Watt, Senior Planner and Michael Lynch, Director of Planning and Development. A special thank you also to the Heritage Council, for its continued advice and support.

As part of this project, numerous Heritage Groups and individuals throughout the County were asked to make submissions on the publication and a wonderful variety of information was submitted, from photographs to stories and local accounts. This wider engagement is a mainstay of the Heritage of County Cork Publication Series and a sincere thank you to everyone who engaged in the undertaking.

There are many aspects to the production of a book but two of the most critical ones relate to the design and printing of the publication itself. A very special thank you in this regard to Ian Barry for his excellent design and a most sincere thank you as well to all at Carraig Print, who have produced a most delightful end product. A particular thank you also to Dr. Elena Turk, who carried out the mapping and Chapter 12.

Lastly, thanks to you, the reader, for your interest in the shared Heritage of County Cork, and in particular the archaeological heritage that abounds.

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Cork County Council

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Heritage Officer and
Commemorations Coordinator
Cork County Council

Mary Sleeman
County Archaeologist
Cork County Council

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Artist's impression of the Cork Horns as a head-piece. Drawing by Rhoda Cronin.

Chapter 1
Introduction

People have been living in the area we now call County Cork for many millennia and in all that time the passing generations have left a little of themselves behind for us to discover, appreciate and understand today. Archaeology divides these things left behind into *monuments* and *artefacts*. Monuments are those things, which survive in the landscape, like ringforts, megalithic tombs, and castles. Artefacts are portable objects that survive from the past, like Stone Age tools and weapons, ancient bronze and iron objects down to everyday objects from the recent past. The previous book in this series, *Archaeological Heritage of County Cork*, described the monuments of Cork. This book is the follow-up to that volume and will deal with the county's archaeological artefacts.

The general outline of this book follows *Archaeological Heritage of County Cork* in that the chapters follow the main archaeological periods, from Stone Age through to Post-Medieval, in that sequence. In each section, after a general introduction, a selection of artefacts is highlighted as exemplars of that period. The selection of these artefacts was made on a number of criteria, that largely depended on the period in question. The key criteria was mainly to be a representative artefact of the period. Some artefacts were selected because of their uniqueness such as the Mitchelstown Face Cup, while others as individual works of exquisite craftsmanship. Many of the other artefacts highlighted are everyday objects, which are now vital clues as to how life was lived in the past. The artefact entries are designed to be read independently so there is some repetition between chapter introductions and artefact descriptions.

Life was less cluttered in the past, especially in the prehistoric era, and the few artefacts that survive from those times reflect this frugality in lifestyle. In later historic times, people had more material goods and so there are more artefacts to select from, thus the selection of exemplars comes from a much wider choice and consequently is more selective. Each artefact featured provides relevant information on an individual artefact: name of artefact, location of where it was found, material used, date, size (where relevant) and where it resides today, followed by a brief account and description of the artefact and how it helps our understanding of the past. In some cases other examples are also incorporated.

Another factor that needs to be minded regarding the selection of artefacts is the random nature of survival. An artefact may survive because of the material it is made from and that material's chance of survival in the ground. Tools made of stone and fired clay in the form of pottery will survive where things made of wood or other organic material will perish quickly. In any case we have to make do with what has survived and make the best use of that in our attempts to understand our past. Imagine if all the portable objects in your house were taken

out and scattered in a field and left there for hundreds or thousands of years - what would survive? And how much of your lifestyle could future archaeologists reconstruct from what survives in that circumstance?

Archaeologists use different techniques and methodologies to try and extract as much information as they can from what survives from the past. This might often seem like guess work and often it is just that. How are changing forms of *burial practices* reflective of how people differed in what they believed about life and its end over time? If a precious artefact is placed in a grave what does that tell us about those who put it there and then covered it over never to be used again? And how much social change is represented by technological advances? Does the appearance of a new type of tool or weapon indicate that it was brought in by immigrants or is it more the consequence of trade or just the adoption of a new technology? To try and answer these questions artefacts are grouped and classified into typologies, compared and contrasted with similar artefacts from elsewhere, radiocarbon dated where possible, subjected to an ever-increasing range of scientific examinations, and all this information then synthesised to extract as much information as possible about the people who manufactured and used these artefacts.

One of the curious features of archaeology is that the further into the future we go the more we are finding out about the past. This is because of the ever-more sophisticated scientific methods, particularly radiocarbon dating, that are now used to analyse and date objects from the past. Also the techniques used in archaeological excavations are continually being refined to extract more precise information from the ground. For example, the soil from an excavation is sieved to recover the smallest of items, like fish bones and seeds that are barely visible to the naked eye. New discoveries are also filling out the picture, often in the context of archaeological work in advance of infrastructural projects like road schemes, pipelines, housing and industrial developments. But there is still a lot that remains unknown and that can only be guessed at from the vaguest of clues. The jigsaw has many pieces but often archaeologists have just a few of these pieces from which they must try and reconstruct the full picture.

Cork's corpus of archaeological artefacts derives from two main sources. Firstly are *chance finds*. These were mostly made in the 18th and 19th centuries by people working the land or cutting turf. Before the advent of mechanical earth-moving machines most work was done by hand-held tools. This brought workers into closer contact with the ground than if sitting in the cab of a machine, and thus they were more likely to recognise something strange or unusual in the ground. The same is true of turf cutting. Of course not every archaeological object found in this way has survived. Many gold objects were sold to jewellers who melted them down for their bullion value. What survives was often the result of individuals, like Robert Day (1836-1914), purchasing objects for their own collections, many of which ultimately end up in museum collection. The important contribution of antiquarians, like Day, has been highlighted recently by the work of Joan Rockley[1] and Margaret Lantry[2]. Organisations like the Cork Cuverian Society[3] and scholars like John Windele[4] also made a valuable contribution by promoting a greater awareness of the county's legacy of archaeological artefacts.

The second great source of archaeological artefacts is from *archaeological excavations*. Excavation can be a difficult process to fully understand; people see archaeologists down on their hand and knees in all kinds of weather and wonder what on earth they are doing. The essence of the process is to excavate the layers of material in a systematic manner, find features and most importantly find the artefacts "in context", whether they be the remains of a pit or a spread of charcoal or sherds of broken pottery. This is the main reason archaeologists object so strongly to metal detection, and treasure hunting in general, because that is a process of finding things "out of context". For example, by placing the objects found *in context*, everyday life in a Neolithic house can be reconstructed from fragments of a broken pot, a scattering of broken flint tools or grains of wheat accidentally burnt in a fire. These things are tossed aside or not even noticed by the metal detectorist whose main objective is treasure hunting. It is also an offence under the National Monuments Acts to search for an archaeological artefact with a detection device.

Of course what survives in the ground over hundreds or thousands of years is dependent on two basic factors. Firstly is the nature of the object itself. In normal soil conditions things made of organic material, like wood or cloth, will disintegrate after a short period of time. Tools and implements made of stone will survive indefinitely, also fairly impregnable to decay is fired pottery. The same is true of metals, particularly gold and bronze but iron is less likely to survive because it rusts. This is reflected in the artefacts on display in the National Museum of Ireland where gold and bronze artefacts predominate in the prehistoric section. Thus, much of prehistoric archaeology is concerned with the study of stone tools, pottery types and gold and bronze artefacts, because these are what survive from the period.

The second factor regarding survival rates is ground conditions. Organic material will survive if the ground is waterlogged, in what is termed *anaerobic* conditions. This is because the organisms that otherwise will devour the material are excluded by water. A wooden dug-out canoe will survive perfectly intact in water but once exposed to daylight will turn to dust in a short period. In today's world sophisticated scientific process can prevent this decay and museums like the National Museum of Ireland will have a conservation laboratory for this purpose.

In County Cork, starting in 1934 with the excavation at Labbacallee tomb[5], the State has sponsored a number of very important excavations notably those by professors of archaeology in U.C.C., firstly by Seán P. Ó Ríordáin and then by his successor Michael J.O'Kelly. Ó Ríordáin's major contribution to Cork archaeology was his excavation at the ringforts at Garranes[6] and Ballycatteen[7]. O'Kelly excavated more widely throughout the county, including Moneen[8], Island[9], Baile Bhuirne[10] and Garryduff[11]. O'Kelly's contemporary in U.C.C., Edward Fahy, also made a noteworthy contribution with excavations at Drombeg[12], Reenascreena[13], Bohonagh[14]. The funding for most of these excavations was provided by unemployment-relief schemes though their objectives were archaeological. The current professor of archaeology in U.C.C., William O'Brien, has continued this tradition with his recent research excavations at Mount Gabriel[15]; the wedge tombs at Altar and Toormore[16], Cashel hillfort and elsewhere in the county[17]. The tradition of U.C.C.'s involvement with ringfort excavations was continued by

Archaeological excavation in advance of M8 motorway between Fermoy and Mitchelstown. Professional workforce of contract archaeologists. Image by John Sunderland, courtesy of Eachtra Archaeological Projects and TII.

Michael Monk at Lisleagh[18]. Important urban excavations have also been carried out in the medieval towns such as Kinsale, Youghal and Buttevant. In Cork City excavations have produced large quantities of artefacts and archaeolgical material, providing valuable information about life in the City going back to Viking settlement. A selection of artefacts from the city excavations is on display in the Cork Public Museum.

In recent years, most archaeological excavations are conducted by contract archaeologists in conjunction with infrastructure and other types of development. Both the State and Local Authorities are empowered by legislation to ensure archaeology is properly safeguarded in the development process. This phase began with the Dublin-Cork gas pipelines in the late 1970s[19] and is now most prolifically represented by Transport Infrastructure Ireland (TII); in Cork extensive archaeological work was done in advance of the M8 motorway schemes; the Ballincollig and Youghal bypasses as well as other road schemes[20]. The production by the State of the *Sites and Monuments* (SMR) record in the 1980s and 1990s and the publication of a five volume *Inventory*[21] of all known and suspected archaeological monuments in the county, has enabled Cork County Council to place archaeological conditions on developments where archaeological material might be encountered. All these efforts, which are ongoing, are adding greatly to preserving the archaeology of the county and hence to advancing our understanding of Cork's past.

An excellent introduction to the prehistoric archaeology of County Cork has been published by Professor William O'Brien of U.C.C.[22]. Other books and essays covering the archaeology of the county are listed in the endnotes to the various chapters. An important source is the *Journal of the Cork Historical and Archaeological Society (JCHAS)* which has been publishing articles on Cork archaeology since the first edition in 1892. All of its articles up to recent

editions are now free to download from the internet on *www.corkhist.ie*. Also very important are the journals published by historical and archaeological societies around the county. A good example is the *Mallow Field Club Journal* that has been published every year since the first journal came out in 1983.

Most branches of the County Council's Library Service contain a local history section and if you are a library member you can order any book from any library in the country for free from your local branch or online. The *Topographic Files* of the National Museum of Ireland are an invaluable source of information for artefacts in their collection from County Cork; available by appointment only. You can also keep up-to-date on discoveries with the excellent magazine *Archaeology Ireland* that has been published quarterly since 1987 and contains all the latest news and developments in Irish archaeology. Limerick Education Centre and the Department of Housing, Local Government and Heritage, have developed a useful educational resource for archaeology called *It's About Time* with a special section on archaeological excavation and artefacts (www.itsabouttime.ie).

The statutory body responsible for curating the country's archaeological artefacts is the National Museum of Ireland. Items from its collections will feature throughout this book, not alone from its Archaeological branch based in Kildare Street, Dublin, but also the Decorative Arts and History section in Collins Barracks (Dublin), as well as the Country Life division in Castlebar, Co. Mayo. In Cork we are fortunate to have an excellent local authority museum in Fitzgerald Park, Cork Public Museum, as well as many fine local and specialised museums throughout the county, all very interesting places and well worth visiting and supporting. These museums are featured later in the book.

Three Age System

In the 19th century the museum in Copenhagen came up with a novel way of classifying the prehistoric objects in their collection. They realised that, in general, objects made of stone were the oldest, and those made of bronze more recent and finally those of iron more recent again. This led to a classification of the periods these objects belonged to respectively as Stone Age, Bronze Age and Iron Age. This system has survived, with some modification, to this day. The main modification is to the Stone Age. This is now divided into three eras: Palaeolithic (Old Stone Age); Mesolithic (Middle Stone Age) and Neolithic (New Stone Age). Palaeolithic stretches back to the dawn of humankind and continues up to the end of the last Ice Age, in Ireland that is to 8,000 BC. Mesolithic in Ireland runs from 8,000 BC up to the establishment of farming around 4,000 BC and the Neolithic. The period between the Neolithic and the Bronze Age, 2,500-2,000 BC is now generally termed The Chalcolithic, but sometimes the Copper Age or the Beaker Period. Though often sub-divided into earlier and later phases Bronze Age (2,000-600 B.C.) is still in current usage as is the Iron Age (600 BC- 400 A.D.).

What is Archaeology?

Three elements are brought together by the study of archaeology. The first is *the past*, the second is *people in the past*, and the third is the study of *people in the past from the physical remains* they have left behind. For convenience these "remains" are divided into two categories: *monuments* and *artefacts*.

Monuments are those things which survive in the landscape, like ringforts, fulacht fiadh, megalithic tombs, monastic sites and castles; for more information on these see the previous book in this series *Archaeological Heritage of County Cork*. Artefacts are portable objects that can, if possible though not always, be kept in a museum. Examples range from flint arrowheads made by Stone Age hunters, through to weapons manufactured in bronze during the Bronze Age and later in iron during the Iron Age, to remnants of the coming of Christianity like shrines and reliquaries, down to objects of more recent vintage. In general, the closer we come in time to the recent past the wider the range of artefacts that survive and the more numerous they become.

History tells much about the past fifteen hundred years but further into the past we are relying on the physical things left behind to tell their own story. Even during the historic period not all the story is told by examining the written word. A ruined church or an abandoned mill, some fragments of an earthenware pot, a clay smoking pipe or old farm machinery, all have their own story to tell if we just allow them to do so in their own words. This is the task of archaeology, to let the "mute stones speak".

Excavation and Artefacts

Archaeological excavation is one of the key methods used in archaeology to gather information about the past. Excavation involves the systematic removal and recoding of layers of soil and the features and artefacts contained therein. The process is highly skilled and time consuming so there needs to be a valid reason why one is carried out and a solid methodology in how it is conducted. All archaeological excavations in the State are carried out under licence issued by the *Department of Housing, Local Government and Heritage* and the *National Museum of Ireland*; these licences are only issued to suitably qualified archaeologists.

There are three basic types of archaeological excavation:

Research excavation: This type of excavation is carried out for the specific reason of enhancing knowledge. It is usually carried out by an academic archaeologist attached to a University. These are funded by a grant from the *Department of Housing, Local Government and Heritage*. The *Royal Irish Academy's National Committee for Archaeology* administers this fund. Recently the Discovery Programme has carried out a series of research excavations (see www.discoveryprogramme.ie) with funding from the National Lottery.

Excavation in advance of development: Today, this forms the vast majority of archaeological excavations carried out in Ireland. These are conducted to the same high standards as research excavations. The difference is that these excavations are carried out in advance of a proposed development, for example a new motorway or pipeline. Commercial archaeological companies usually carry out this type of excavation. The excavation is paid for by the developer. However, there should always be a presumption in favour of avoiding developmental impacts on the archaeological heritage. Preservation in-situ must always be the first option to be considered rather than preservation by record in order to allow development to proceed, and preservation in-situ must also be presumed to be the preferred option[23].

Rescue Excavation: This occurs in instances where immediate intervention is needed to prevent loss of archaeology in unprecedented circumstances. This might be when something is found accidentally, like a Bronze Age *cist* burial, that can't be left exposed to the elements. More recently the ravages of climate change necessitate urgent action before erosion destroys the archaeology. These excavations are often paid for by the State or the Local Authority.

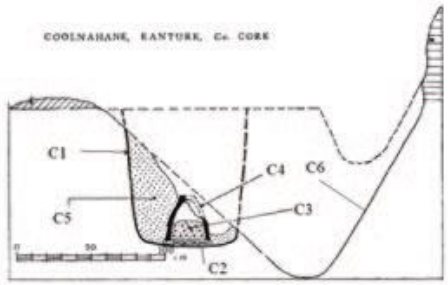
Stratigraphy: The first aim of any archaeological excavation is to understand the stratigraphy of the site. In other words the objective is to disentangle what is in the ground in terms of the sequence in which things were laid down over time. These "things" are often termed *layers*, with one *layer* overlying the next and so on over time. The archaeologist needs to identify what is the oldest *layer*, the next oldest and so on up to the most recent. In some cases this is straightforward with each succeeding layer laid down one on top of the other. But this is very rare and most excavations have to disentangle a complex *stratigraphy* representing different events at different periods of time often tangled up in the ground as later generations dig-up or somehow interfere with what is already in the ground. For example, the remains of a Neolithic house may be pock marked by Bronze Age pits and later cut by medieval field boundaries and then the whole area disturbed by recent activity. This *stratigraphy* is what archaeologists down on their knees scraping at the earth with their trowels are trying to uncover and understand.

Of course different conditions make for very different types of excavation; there is a great deal of contrast between excavating the deep artefact-rich stratigraphy of an urban site to one in an agricultural field where all that has survived the plough is what is cut into the underlying natural boulder clay, and few artefacts will have survived the soil's acidity.

Context sheets are filled-in by the archaeologist as the excavation proceeds. Image by John Sunderland, courtesy of Eachtra Archaeological Projects and TII.

Single-context Recording: What is important in an excavation is to record what is found in a correct and intelligible fashion. A popular way of doing this is by *single-context recording*. A *context* is an event in the past that is recognised by the archaeologist as they excavate the ground. The drawing below is a cross-section of the urn burial in Coolnahane. The burial is the feature which can be divided into six separate events represented by six individual context numbers:

C1: the pit for the burial is dug
C2: a rough paving of stones is placed at the bottom of the pit
C3: a bundle of cremated bones is placed on the paving
C4: the urn is inverted over the cremated remains
C5: the pit is backfilled
C6: the burial is discovered when a drainage ditch is dug



Section drawing of burial at Coolnahane with superimposed context numbers C1-C6. In this instance C1-C5 represent one feature which is a pit burial.

In single-context recording each context is recorded on a pre-forma sheet giving all the relevant information. If a burial like this was found in an excavation it would be termed a *feature* and most excavations contain a myriad of such features so that the recording system needs to deal with all of that complexity, often creating a myriad of *context* and *feature* sheets and the related computer databases.

Another essential element in recording an excavation is the drawing of features as they are exposed during the excavation. This is often done by placing a gridded planning frame over the feature and using this as a template to draw the feature. As the skeleton will be removed for storage and later analysis when the recording is complete, the drawing must be an accurate representation of what is in the ground.

Photography is another important tool for recording features and contexts, both before and after they are excavated.

Photograph of a feature before it is excavated. Information board gives name of excavation (Coolkaleen Lower 2), the excavation licence number (E06061) and the number of the context (C41); note metre sticks to give scale and arrow to indicate magnetic north. Image courtesy of TII.

Finds from excavations: *Finds* is the general term used by archaeologists for all the removable artefacts found in the ground during an excavation, from sublime finished artefacts like a polished stone axe to discarded "rubbish" like fragments of broken pottery (sherds) or animal bones to rusty iron nails or shells and nuts. What is important is that all of these artefacts are recorded and conserved in an appropriate manner no matter how mundane or incidental they may appear to be in themselves.

The basic principle is that each find should have a unique number and be individually recorded. The main exception to this is where a group of individual finds are closely related and in effect represent one find, for example, a collection of broken sherds that all come from the same pot. Where possible the individual find number is inked onto the object.

Flint blade with its find number. The first part is the licence number of the excavation (E2410) and then its individual number from that excavation (A1:60). Image courtesy of TII.

The strategy for recording, lifting, handling and processing *finds* will depend on the nature of the site being excavated and the artefacts that are found. In a waterlogged site where organic material can be expected conservation of *finds* will be an immediate and constant concern. By contrast a dry site will present a different set of issues requiring different conservation strategies. The expected number of *finds* will be small in some sites but on others, like in a well-preserved urban medieval site, the number of finds will be numerous, possibly in the thousands, and of much variety.

Finds being processed in the finds office of an excavation. Note the finds are in sealed and labelled polythene bags. Image courtesy of Eachtra and T.I.I.

In most cases when a context is being excavated the archaeologist will use a *finds* tray to keep the finds from that context. When the context is excavated these finds are then transferred to a polythene bag(s) which are labelled with the appropriate identifying names and numbers. These bags are then transferred to the *finds office* for further processing as appropriate.

One of the chief functions of the finds office is to prepare finds for post-excavation. This is when groups of finds, like animal bones, human bones, pottery types, metalwork, etc., are sent to an expert in those areas for specialist analysis. It is also the responsibility of the finds office to process samples for radiocarbon dating and for conservation if that is necessary.

Excavation Reports: The objective of all this activity and analysis is to produce an excavation report that explains and makes sense of all that was found. Research excavations conducted by academic archaeologists from third-level institutions are often published in journals like the *Proceedings of the Royal Irish Academy (PRIA)*, the *Journal of the Royal Society of Antiquaries of Ireland (JRSAI)* and the *Journal of Irish Academy (JIA)*. For larger scale excavations the report may be published as a monograph. Transport Infrastructure Ireland (TII) has an extensive series of publications detailing their archaeological work (see *tii.ie/technical-services/archaeology/ publications/*). Wordwell Books publishes an annual report giving a brief synopsis of all excavations carried out in the State and this is also available on the website *www.excavations.ie*.

As part of their licence conditions, all excavations must send a report on their findings to the *Department of Housing, Local Government and Heritage*. Most of these will never be published as such but the reports can be accessed through the Department's Archive Unit. The application form to view these is available on the Department's website (*archaeology.ie/publications-forms-legislation/forms*).

The National Museum of Ireland, and museums accredited by it, have the responsibility for curating all the archaeological artefacts found in the State. Only a very small selection of these is on display in the museum but all are available, by appointment, to researchers.

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Chapter 2
The Old Stone Age
Palaeolithic (Old Stone Age: palaios= old; lithos= stone)

The Palaeolithic is the longest period in prehistory lasting about two and a half million years from the first appearance of stone tools up to the end of the last ice age around 10,000 BC. Until very recently there was no definitive evidence that the island of Ireland had any human habitation before 8,000 B.C. This was surprising because there is evidence of humans just across the Irish Sea in Wales from 30,000 B.C. At that stage what is now the island of Britain was part of the continent, joined by land now under the North Sea (*Doggerland*).

During the last Ice Age (120,000-10,000 B.C.) the landscape was not covered by ice all the time - there were a number of warmer intervals (*interstadials*) when the ground thawed enough to create tundra conditions like modern-day Siberia. These warmer periods allowed large grazing animals like reindeer, mammoth and giant deer, to move north across Europe followed by bands of hunters. Since these animals reached Ireland at these warmer times did the people who hunted them in Europe and Britain follow them here as well?

The evidence that these animals were in Ireland during the last Ice Age comes from cave excavations. Such excavations were popular in the late 19th /early 20th century and a number took place in County Cork, in caves at Killavullen, Castletownroche but particularly at Castlepook, a cave system located just north of Doneraile[1]. Here, from 1905 until his death in 1913, Richard Ussher excavated a great collection of animal bones.

Castlepook is a cave system where the solvent action of water has eroded the limestone bedrock to create an underground network of narrow passageways opening out into larger galleries. These wider and higher galleries were given evocative names by Ussher, like Wolf Hall, Fairy Hall and Hyena Land. In broad terms what Ussher found was a floor of stalagmite deposits overlying and sealing sand that in places was up to 12 feet deep, the sand brought in by flood waters. It was in this sand that the ancient mammal bones were found. These bones have been identified as including reindeer, arctic fox, wolf, lemming, brown bear, mammoth, giant deer and hyena[2].

A report published shortly after Ussher's death, but based on his notes, estimated that some 35,000 bones were recovered from the cave system; most of them were fragments, many too small to be identified to a specific species[3]. Ussher sent these, in 343 parcels, to the National Museum in Dublin for safekeeping but somehow only 2,000 of these bones have survived in the Museum to this day. The conclusion drawn from a study of the bones at that time was that the cave had been a hyena den over a considerable period of time where these animals devoured their prey and raised their young. Their main source of food, judging by the number of bones, was reindeer but also woolly mammoth and Giant Irish Deer. The cave was also

home at times to brown bears, wolves and arctic fox, the latter may have been hunting lemming scavenging on carcases in the cave.

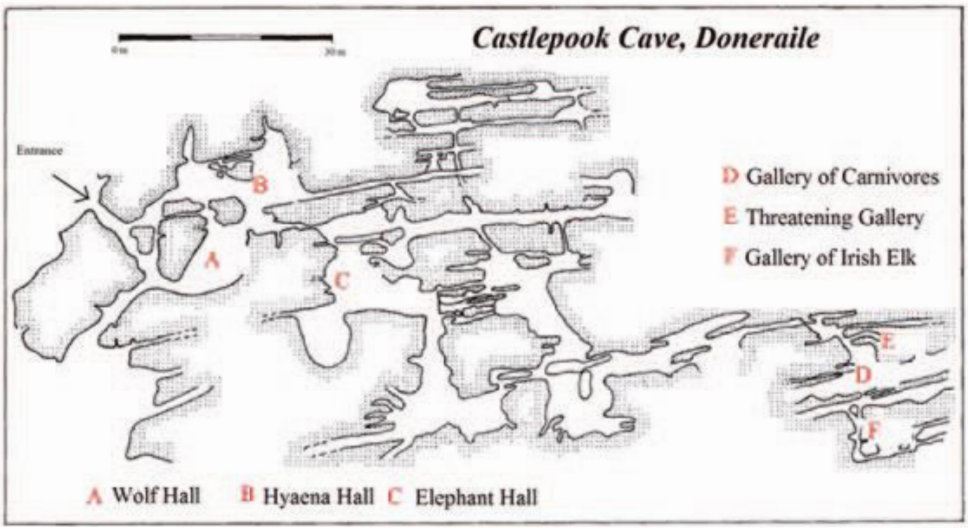
The bones from Castlepook Cave came under renewed scrutiny in the 1990s when *The Irish Quaternary Fauna Project*, under the direction of Professor Peter Woodman of U.C.C., radiocarbon dated a selection that placed them in the period 45,000- 20,000 B.C., well within the last Ice Age.

A new discovery regarding the Castlepook Cave bones was revealed by Dr. Ruth Carden in the documentary *The Burren: Heart of Stone*, which first aired on RTE One in April 2021. In the programme Dr. Carden explained that what she had found had "just changed Irish human history." Carden, a specialist in ancient animal bones, had found cut marks on a reindeer bone that she decided was made by a stone tool when the animal was butchered. The radiocarbon date of the bone placed the death of this reindeer at around 30,000 B.C. This cut mark indicates evidence for a human presence in North Cork 20,000 years before anywhere else in

Artist impression of Hyena devouring a carcass in their lair in Castlepook Cave around 30,000 years ago. Image by Rhoda Cronin.

the country. Some thirty thousand years ago Stone Age hunters were stalking reindeer herds across the Doneraile tundra. The hunt is now on to find the stone tools they used to butcher these animals and the flint arrowheads and spear tips from their hunting weapons.

The bones from Castlepook, in Dr. Carden's words are "a treasure trove of information." This single cut mark opens up a whole new exciting potential in Irish archaeology. It gives us a glimpse into the lifestyle of nomadic hunters following the great herds of reindeer that moved into north-western Europe during warmer phases of the last Ice Age. No stone tools belonging to these Palaeolithic hunters have yet been found in Ireland but once it is established that they were here and using these tools, it is probably only a matter of time before they are found.

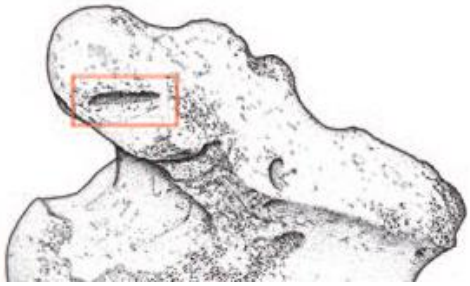


Plan of cave showing the six galleries (A to F) from which bones were selected for radiocarbon dating by The Irish Quaternary Fauna Project

ARTEFACT 1

Name: Reindeer bone
Location: Castlepook Cave, Doneraile
Material: Femur of deer's leg
Date: c. 31,000 BC
Period: Palaeolithic
Collection: National Museum of Ireland, Natural History

Highlighted on the next image is a drawing of the cut mark which Dr. Ruth Carden has decided was made by a sharp stone tool when the reindeer was butchered by Stone Age hunters. It is unlikely the animal was butchered in the cave - more likely the discarded remains were scavenged by hyenas or wolves and taken by them into their lair in the cave.



Cut mark on reindeer bone is highlighted. Drawing by Elaine Lynch.

This bone is one of thousands excavated in Castlepook Cave by James Ussher between 1905 and 1913. The bones are now in the collection of the National Museum of Ireland and have recently been studied by Dr. Ruth Carden, an expert on ancient animal bones. She recently made the startling revelation that this mark was made by a stone tool - evidence that the animal was hunted, killed and then butchered by humans. This bone has now been radiocarbon dated to 30,000 B.C. and therefore pushed back the earliest evidence for humans in Ireland by 20,000 years.

Reindeer are herd animals moving in long continuous lines and can cover over 30km a day. They are well suited to a tundra climate, eating mosses and lichens and are able to endure extreme cold. Their attraction to Stone Age hunters is obvious - their meat is very nutritious and their pelts are excellent for making clothing and tent coverings in a very cold climate. Reindeer are placid animals and can be used as pack animals; this may have been necessary to carry tents and other heavy equipment in pace with the fast-moving herds.

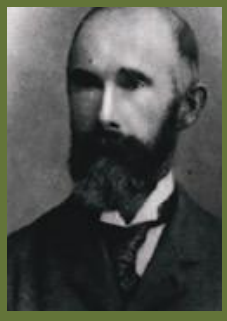
Palaeolithic hunters used a variety of weapons to kill their prey but mostly spears and bow and arrows. These had flint points with razor-sharp edges. Great collections of these flint spearheads and arrowheads have been found in Denmark and Northern Germany that seems to have been the crossing points for reindeer hunters crossing land now under the North Sea (called Doggerland) into Britain and thence Ireland.

Artist impression of Palaeolithic hunters ambushing a herd of reindeer with spear and bow-and-arrow. Image by Rhoda Cronin.

The most characteristic Palaeolithic stone artefact is the hand-held axe, known as a *handaxe*. One of these was found by someone digging in their garden near Kilworth in the 1980s. Though this is just the type of implement that might have caused the butchery marks on the Castlepook bone, at the time of its discovery there was no evidence for human activity in the country before 8,000 B.C. A number of other factors led Prof. Peter Woodman, the leading expert on Stone Age artefacts, to reject the axe as a genuine discovery. He concluded that this type of axe was English in origin and probably lost in the garden by an antiquarian collector, possibly a soldier attached to the nearby British Army camp. To be accepted as a genuine find an axe like this needs to be found in *context*, as in a cave deposit that has an appropriate radiocarbon date.

Drawing of the Palaeolithic handaxe found in a garden near Kilworth in the 1980s

Richard John Ussher (1841-1913)



Ussher was a member of a landed Waterford family and was born in Cappagh House on the family estate in West Waterford, located mid-way between Cappoquin and Dungarvan. He inherited the estate in 1854 when his father died but because of ill-health spent much of his youth and young adulthood abroad recuperating. He returned to Cappagh in his 30s and built a new house there in the 1870s. The house was designed and built by two engineers working on the Mallow-Dungarvan railway line that passed just south of the estate; Cappagh Station survives, now a private residence. Typical of his class Ussher was a unionist and occupied positions in the local Waterford County Grand Jury administration, including Deputy Lieutenant, High Sheriff and Magistrate.

Ussher was an enthusiastic ornithologist and published a seminal work on the subject in 1900 entitled *The Birds of Ireland*. But his attention turned to cave exploration later in his career with a particular interest in discovering the bones of extinct animals. He credits James Grove-White with bringing Castlepook Cave to his attention and digging there became a major focus of the last decade of his life. He died in 1913 and was buried in the family vault in Whitechurch graveyard, a short distance from Cappagh House.

According to his obituary *"he thoroughly enjoyed working underground, and provided himself with a complete digging equipment, his clothes being partially covered with stout leather, to avoid injury or abrasion ... he was always accompanied by his faithful valet, John Power, and usually erected a hut at the mouth of the cave, spending weeks laying bare the bones of Mammoth, Bear etc."* The obituary goes on to describe him as *"a fairly big man, almost six feet high, well set-up, with reddish hair and beard."* His character was *"gentle, yet resolute, but sometimes inclined to be credulous ... deeply religious, he carried his principles into practice and bore himself with great patience in adversity."*

It is undoubtedly ironic that one of James Ussher's ancestors, Archbishop James Ussher of Armagh (1581-1656), set the beginning of the world as occurring on 22 October 4004 B.C., based on his study of the genealogies in the New Testament and this date was taken as "gospel" well into the 19th century.

Richard Ussher with workmen investigating Castlepook Cave in 1905. Photo by Grove White.

Flint

Flint is a stone that occurs as nodules in sedimentary rocks, especially in chalk. When fractured it produces a razor-sharp edge and has been used by humans to make tools from the dawn of prehistory. Archaeologists describe the technique of creating a stone tool from a nodule as *knapping*. The knapper struck the nodule with a stone hammer and a flint flake peeled off. A person skilled in knapping could produce a range of tools from arrowheads to knives to scrapers, all essential to Stone Age people. The tell-tale sign that a flint flake has been deliberately struck is the presence of a *bulb of percussion*. This is a noticeable swelling just below where the flake was struck. As flint becomes blunt from use tiny flakes were struck off along the edge to make it sharp again, this is termed *reworking*.

In Ireland flint is most plentiful in the north-east and there is no reliable source in Munster. However, nodules of flint are occasionally washed up on the beaches of East Cork and Waterford from some offshore source, and this is probably where most of the flint used in prehistoric Cork was sourced.

This picture shows a flake of flint that has been struck from the parent core with the bulb of percussion evident on the inner surface of the flake.

Flint knapper using hammer stone to break off flakes of flint from the parent core. Notice the discarded flakes on floor beside him- these are often the evidence found on archaeological excavations from this activity. Image courtesy of TII.

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Chapter 3
The Middle Stone Age
Mesolithic (Middle Stone Age: mesos= middle; lithos= stone)

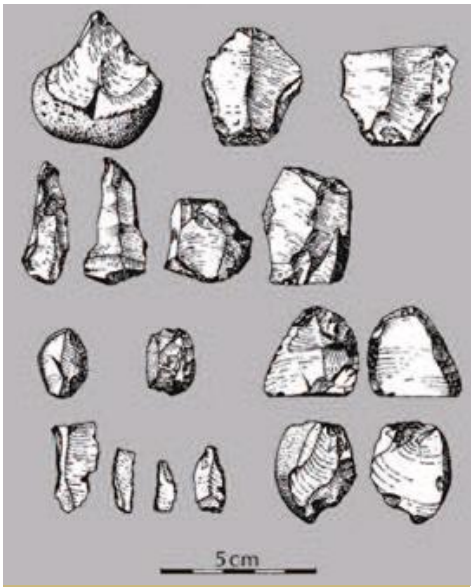
Early Mesolithic (8,000 B.C. – 6,000 B.C.)

Sometime around 10,000 B.C. the last Ice Age gave a final icy kick that was cold enough to drive out the remaining reindeer, Giant Irish Deer, as well as any Stone Age hunters still around. By 8,000 B.C. the freezing conditions had relented to the milder weather that continues to this day. Two effects of this climate change had a profound impact on the environment. Firstly, the melting ice caused a rise in sea level enough to flood the land bridges between Britain and the Continent and between Britain and Ireland. This isolation affected the movement of plants and animals so that Britain has fewer species than Continental Europe and in turn Ireland fewer again than Britain. And secondly, the warmer weather was favourable for tree growth and for the first time in more than 100,000 years the Irish countryside was covered in forest, with oak, elm, birch, pine and hazel predominant.

By 8,000 B.C. people also had arrived into Ireland surviving by hunting, fishing and gathering whatever wild food was available. Long gone were the herds of large grazing animals; apart from wild boars there were few animals in the dense woodlands worth hunting. These hunter-gatherers would look elsewhere for their food supply, along the coastline, in the estuaries and up the river systems. Fish was now the chief item on the menu. But how do we know this when nothing they built has survived in today's landscape - there are no Mesolithic monuments? The answer is in finding the stone tools they used, particularly the sharp tips of their arrows and spears.

The archaeological excavation that tells us most about Mesolithic life in Ireland remains that conducted by Peter Woodman at Mount Sandel in County Derry between 1973 and 1977[1]. Here, by the fortune of chance, a camp site inhabited around 8,000 B.C. had escaped the worst ravages of the plough. The site was discovered during the construction of a housing estate when one of the workmen, who had an interest in archaeology, noticed man-made flints in the disturbed ground. Artefacts like these are often the only tell-tale signs of a place where Stone Age people had lived.

The Ulster Museum was alerted to the finds and thus began one of the most important archaeological excavations of a prehistoric site in Ireland. The excavation revealed the outline of huts that were evident as circular patterns of *stakeholes* - dark stains in the ground left by timber supports for the cover of the hut - probably animal skins. Scattered around these huts were discarded food remains: animal, bird and fish bones, seeds, nuts and shellfish. Also scattered about was a litter of discarded and broken flint implements as well as the waste chippings from their manufacture - the litter left behind by a flint knapper. The vast majority of these were microliths of flint used in arrowheads and knives as a cutting edge. Microliths are small flint flakes and are diagnostic artefacts of the Early Mesolithic Period.



Worked flints discovered by U.C.C. archaeologist by fieldwalking the ploughed fields in East Cork and the Blackwater Valley; the larger pieces are Late Mesolithic and from East Cork; the four small pieces on bottom left are Early Mesolithic microliths from the Blackwater Valley near Ballyhooly.

Mesolithic flint blades from Rath-healy excavation; these are held in the hand and used as a cutting tool. Image courtesy of TII.

The discovery of Mount Sandel was an incredible one that tells a story which otherwise would be very difficult to piece together. At the time the radiocarbon dates from the site pushed back the earliest evidence for a human presence in Ireland by 2,000 years.

When Peter Woodman was appointed Professor of Archaeology in U.C.C. in 1982 there was no Mesolithic in County Cork, nor anywhere else in the south-west for that matter. Or rather nobody had found any evidence for it by that date. Woodman began the task of finding the missing Mesolithic by walking teams of archaeologists across ploughed fields looking for flint, especially microliths, in the upturned soil[2]. Mesolithic flints are very small so a keen eye is necessary to spot them. The areas he selected for this exercise were the coastal area of East Cork and the Blackwater valley between Mallow and Fermoy; these are also tillage areas so ploughed fields are plentiful at certain times of the year. These locations were selected because evidence from elsewhere in the country showed that Mesolithic people favoured living on the coastline especially estuaries and from these up the river systems; Mount Sandel is located on a bluff overlooking the Rived Bann. By camping in these locations Mesolithic people could maximise the bounty of the sea, the river and the forest verge. Could a Mount Sandel be discovered in Cork?

Radiocarbon Dating

All living things, both plant and animal, contain carbon atoms. Amongst these atoms is a radioactive isotope of carbon called C14. Whilst the organism is alive the amount of this isotope is constant. But when the plant or animal dies, because the isotope is radioactive, the amount of C14 in the dead organism begins to reduce. This happens at a relatively constant rate so that if the amount of C14 can be calculated it is possible to estimate how long it is since the plant or animal has died. Radiocarbon dates are not exact to a calendar year but give an approximated date, often to within a few hundred years. Nonetheless, this ability to know approximately how old something is has revolutionised archaeology and radiocarbon dates are the core facts of what we know about the distant past. Most radiocarbon dates obtained in Ireland today came from the *14Chrono Centre Lab* in Queens University Belfast.

Initial fieldwalking in East Cork proved fruitful producing flints mostly of Late Mesolithic date but the site that caught the archaeologists' attention was in the townland of Kilcummer Lower, between Castletownroche and Ballyhooly. Not only were some microliths identified in the ploughed soil but their location was reminiscent of Mount Sandel, a hollow area atop a bluff overlooking the river. However, the excavation in 1990, by Cork archaeologist Liz Anderson, was disappointing as the plough had done its damage here over the millennia and nothing was left of the seasonal campsite that undoubtedly existed here some ten thousand years ago, save a scatter of some 300 fragments of worked flints[3]. But the important outcome of this work by Woodman and Anderson was in establishing that there was a human presence in County Cork during the Mesolithic period.

Since then the baton for finding Mesolithic evidence in the county has passed to archaeologists working on T.I.I. schemes, notable on the M8 motorway[4]. The finds from these schemes so far have been fragmentary and often just a few flints are found in the topsoil without any associated context. At Rath-healy, just north of Fermoy, a pit produced 22 flints, mostly blades, of Early Mesolithic type[5].

A recent study of ancient DNA suggests that these Mesolithic people, who came into Ireland around 8,000 B.C., were dark-skinned and blue-eyed[6]. The traditional view is that they lived off the land as best they could but recent studies have revealed a more complex picture[7]. Their favoured meat was wild boar but it now seems likely that they introduced this animal into Ireland and may have managed their numbers by selective hunting. These people were also constructing fish traps in the rivers and estuaries to maximise fish catches. Their food preparation was sophisticated enough to realise that water lily seeds, which they liked, had to be soaked in water for at least two weeks before they were edible. We can also see specialisation in their manufacture and use of stone tools.

Further south, in Curraghprevin townland near Rathcormac, a hearth produced a radiocarbon date of 6,000 B.C. but no artefacts[8]. Some stake-holes beside the hearth suggested to the excavators that this was the remains of "some form of drying rack, immediately adjacent to the hearth", and that "the site was probably occupied for only a short period (perhaps for a night or two) by a transient hunter-gatherer group."

Archaeologists walking ploughed field looking for flint tools.

Later Mesolithic (6,000 B.C.- 4,000 B.C.)

Around 6,000 B.C. change was afoot in Ireland. This is most evident in the manufacture of flint implements. Gone from the scene are the elegant microliths favoured by hunters for their arrowheads and spear-tips. The new flints are larger and chunkier and less sophisticated in their manufacture. Another indication of social change is that whilst Irish microliths relate closely to similar implements in Britain the later flints do not have many parallels outside the country and indicate less contact across the Irish Sea from about 6,000 B.C. It would seem that with rising sea levels the country became more isolated from its neighbour across the Irish Sea and developed its own individual characteristics as reflected in an indigenous stone industry.

There isn't a great deal of evidence for activity in Cork during the later Mesolithic period. Perhaps the most informative site yet discovered was during archaeological excavations in advance of the M8 motorway at Gortore, near Kilworth. Here, on the banks of the Funcheon River, six pits were found which the excavators considered "may have formed part of a temporary structure or structures, associated with riverine fishing/hunting and related processing activities." Apart from the site's location adjacent to the river, the other main indication of fishing activity were two stone points that are considered to be specialised spear tips for catching large fish like salmon. Analysis of the soil samples showed evidence for the collection of wild nuts, particularly hazelnuts, berries, legumes and tubers. Traces of these survive because they got burnt in the fire when being dried or cooked, and charred remains survive well in the ground; unfortunate for Mesolithic cooks but fortunate for archaeologists eight thousand years later. The emphasis on fishing in this area at this time was further underlined when a similar spear point was found nearby at Caherdrinny, but this was out of context in the topsoil and not associated with any particular archaeological feature[9].

Do these changes in the type of stone tools being used post 6,000 B.C. signal the arrival of a new hunter-gatherer population into Ireland? If these new tool types could be paralleled elsewhere in Britain and the Continent then the argument could be made for new arrivals, but this is not the case. The type of stone implements being manufactured in Ireland between 6,000 and 4,000 B.C. are unique to the island (excepting similar ones on the Isle of Man), and seem to show that the hunter-gatherers here were developing their own technologies in isolation from foreign influences and that these people were the descendants of the earlier Mesolithic people[10].

Reconstruction of flint knapping and hafting at Gortore. Drawing by Rhoda Cronin (After Johnston & Kiely 2019, 99, illus. 2.18.5). Image courtesy of TII.

Sometime around 3,800 B.C. a movement of people that had started in the Near East around 9,500 B.C. reached Ireland. This was the great migration of communities bringing with them a knowledge that would change the course of human history more than any other change before or since - the ability to farm. In some parts of Europe the native Mesolithic population adopted this new way of food production. But in Ireland, according to information from ancient human DNA, the Mesolithic hunter-gatherers were quickly swept aside by immigrant farmers and we move into the Neolithic period.

Flint artefact found during field walking.

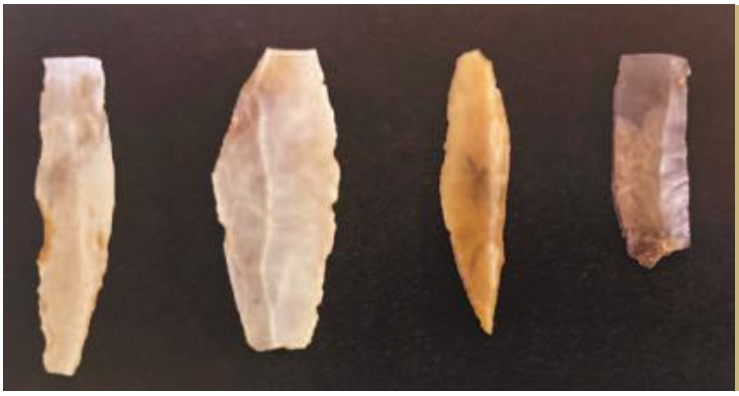
ARTEFACT 2

Name: Microliths
Location: Kilcummer Lower
Material: Flint
Date: c. 8,000 B.C.
Period: Early Mesolithic
Collection: Department of Archaeology, U.C.C.
Size: Length: 5 centimetres

Microliths from Kilcummer Lower. Image courtesy of Cork Public Museum.

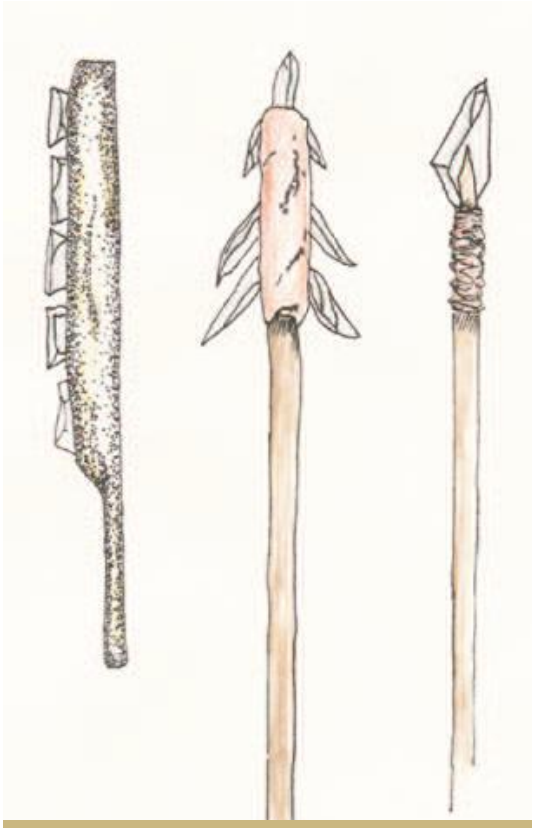
Microliths are tiny flint artefacts, rarely more than 5 centimetres in length, made with great precision by specialised knappers. Because of their razor-sharp edges they were used as arrowheads or for the cutting part of knives. They are useful to archaeologists as their use was restricted to the earlier part of the Mesolithic period. As no monuments survive from the Mesolithic period the only way of finding evidence for human activity from the period is by finding these diagnostic flints in ploughed fields.

However, it takes the keen eye of an experienced archaeologist to spot these tiny flakes of stone on the surface of a ploughed field. The discovery of a concentration of microlith flints by U.C.C. archaeologists while field walking at Kilcummer Lower suggested the location of a Mesolithic campsite on a bluff overlooking the Blackwater River. A four week excavation by Elizabeth Anderson in 1990 proved disappointing. Here the limestone bedrock was close to the surface and the soil overlying it was thoroughly disturbed by the plough so that Mesolithic flints were found in the same mixture as modern rubbish, indicating that the whole site was disturbed.



Microliths found fieldwalking in County Cork. Image courtesy of Prof. William O Brien.

Microlith from Kilcummer Lower.



Knife (left) and two arrowheads using microliths as their cutting edge.

Though some 300 flint flakes were found during the excavation no natural nodules of flint were found, either here or elsewhere in fieldwalking along the Blackwater valley. This suggests that the flint had to be brought in from at least 40km away, probably up the river from the East Cork/West Waterford area. Another disappointment of the excavation was that no charcoal or other organic material was found in sufficient quantity to be used for radiocarbon dating. However, there was enough evidence at the site for Anderson to suggest that "the siting of Kilcummer was deliberate, to take advantage of the migratory runs of salmon and eel."[11]

These small artefacts tell us an incredible story. We now know there were bands of people moving along the Blackwater River following the natural seasonal runs of fish in the river. They understood these natural cycles and were skilled at what they did as judged by the precision of the tiny flakes of flint they were able to produce to make a sharp edge to their fishing arrows and spears. Perhaps somewhere along the Blackwater the undisturbed remains of one of their seasonal campsites has survived the ravages of time but finding it will not be easy, even if it does exist.

ARTEFACT 3

Name: Stone axe
Location: Gortore, Fermoy
Material: Mudstone
Date: 8,000- 6,000 B.C.
Period: Early Mesolithic
Collection: National Museum of Ireland
Size: Length: 10 centimetres; width 4 centimetres

This polished mudstone axe is an important archaeological discovery as it is considered one of the earliest examples of this type of tool yet discovered in Ireland. The axe has a pointed edge at its working end but has been damaged so that part of the upper surface is missing; it may have been discarded when it broke. Polishing improved the cutting edge and whilst it might seem unnecessary to polish the rest of the axe nearly all examples are completely polished. This all-over polishing suggests their manufacture was a specialised production and they may well have been traded as finished implements rather than made by the people who actually used them.

Mudstone axe from Gortore, Fermoy. Image courtesy of TII.

Polished axe heads are one of the most numerous Stone Age artefacts found in Ireland but most date to the later Neolithic period. The axes were hafted, that is affixed to a wooden handle and most likely used as a general utility tool for woodworking. Where fishing was a main occupation, like at Gortore, they may have been used in making fish traps to be used in the nearby river. They were also probably used in clearing trees and bushes to make camp sites.

Two flint blades, a useful tool with a sharp cutting edge from the Gortore excavation. Image courtesy of TII.

This axe was discovered by archaeologists monitoring the removal of ploughed soil in advance of work on the M8 motorway. This axe is one of a group of Early Mesolithic finds from an area that was subsequently archaeologically excavated. However, the excavation found no trace of any huts or houses, just a pit and some stake-holes - the last surviving vestiges of a campsite used by a group of people mostly engaged in fishing in the nearby river judging by the spear points found at the location (see next Artefact).

ARTEFACT 4

Name: Spear point
Location: Gortore
Material: Shale
Date: 6,000 B.C.
Period: Late Mesolithic
Collection: National Museum of Ireland
Size: Length: 11 centimetres; Width 2.5 centimetres

Shale spear point from Gortore, Fermoy. Image courtesy of TII.

Apart from in the north-east of the country, flint was not a plentiful resource in Stone Age Ireland, and so people had to use other stone types, like chert, quartz, mudstone, sandstone and shale to make their tools. Though none of these produced a cutting edge comparable to that of flint, they could, if worked by an expert *knapper*, be made into useful implements. In the 1980s, John Bradley in his excavation at Moynagh Lough, County Meath, recognised a group of shaped implements that he interpreted as spearheads used to catch fish; these were subsequently termed a *Moynagh Point*. This example found at Gortore, Fermoy, during archaeological monitoring in advance of the construction of the M8 motorway, is a typical, if somewhat damaged, *Moynagh Point*. Though a stray find from the topsoil it fits in well with the rest of the discoveries at this location which all indicate the former presence here of a seasonal camp inhabited by people fishing in the nearby Funcheon River.

This emphasis on fishing in this area during the Mesolithic was further underlined when another *Moynagh Point* was found nearby at Caherdrinny, also by archaeologists monitoring topsoil removal in advance of the construction of the M8 motorway.

Fragment of Moynagh Point from Caherdrinny. Image courtesy of TII

These stone points are specially made implements and the fact that identical types have been found elsewhere in the country implies that the manufacture of these was a specialised production and probably one that involved some form of trade. These Mesolithic hunter-gatherer bands that set up camp on the banks of the Funcheon River at Gortore, some eight thousand years ago, were not just isolated groups but were somehow linked into a wider world in which specialised stone tools, like spear points, and raw materials like nodules of flint, were being traded across the country.

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[2] Woodman, P. (1984) 'The early prehistory of Munster', Journal of the Cork Historical and Archaeological Journal 89, 1-11

[3] Anderson, E. (1993) 'The Mesolithic: fishing for answers', in Shee-Twohig, E. and Roynane, M. (eds), Past perceptions: The Prehistoric Archaeology of south-west Ireland, Cork University Press, Cork, 16-24

[4] Johnston, P. and Kiely, J. (eds), (2019) Hidden Voices: the archaeology of the M8, TII Heritage 7; Hanley, K and Hurley, M.F. (2013) Generations: The archaeology of five national road schemes in County Cork, NRA Scheme Monographs 13

[5] Hanley and Hurley, ibid., 36-38

[6] Cassidy, L.M. et. al. (2016) 'Neolithic and Bronze Age migration to Ireland and establishment of the Atlantic genome', Proceedings of the National Academy of Sciences USA 113, 368-373

[7] Warren, G. (2015) '"Mere food gatherers they, parasites upon nature ... ", food and drink in the Mesolithic of Ireland', PRIA 115, 1-26

[8] Hanley and Hurley, ibid., 39-41

[9] Johnson and Kiely, ibid., 62-74

[10] Mallory, J.P. (2015) The Origins of the Irish, Thames and Hudson, London

[11] Anderson, E. (1993) 'The Mesolithic: fishing for answers', in Shee-Twohig, E. and Roynane, M. (eds), Past perceptions: The Prehistoric Archaeology of south-west Ireland, Cork University Press, Cork, 21

Chapter 4
The Farming Revolution (4,000 B.C. - 2,000 B.C.)
Neolithic (New Stone Age: neos=new; lithos= stone)

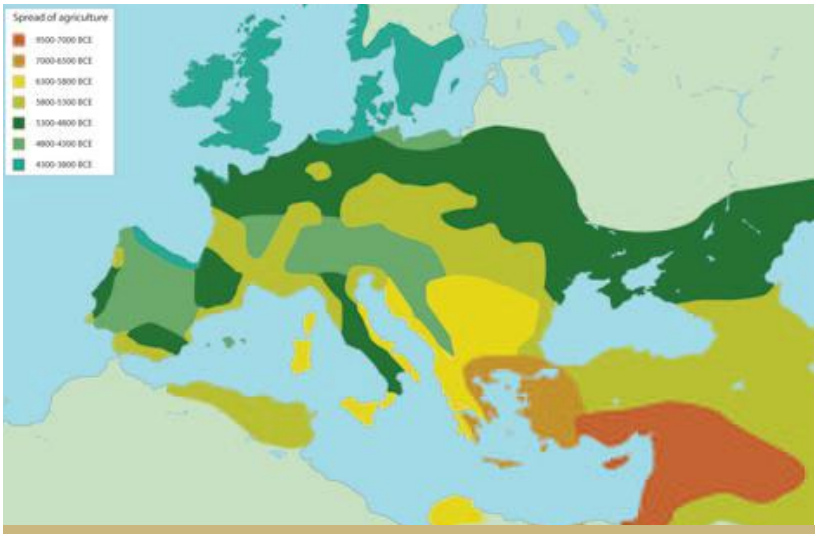
Sometime around 10,000 B.C. and probably over many generations, the people living in the area of the Golden Crescent (modern-day Southern Turkey; Palestine; Israel; Lebanon; Syria and Iraq), began to control the plants and animals native to the area. The plants were cereals, wheat and barley, and the animals were sheep, goats and cattle. They tamed the animals and kept them in herds thus creating a ready supply of meat. They collected the seeds of cereals and grew new plants in ploughed fields. Gradually these animals and plants responded to this selective breeding and thus farming was invented, the greatest technological advancement in human history. Instead of a life totally involved in hunting and gathering nature's bounty, people now had control over their food supply all year round. From this came permanent settlements where social organisation enabled activities such as craft production by artisans free from the constraints of constant food procurement. From craft production came trade and social networking. The landscape itself changed from a place in which humans existed as part of the food chain to one they dominated.

Agriculture and craft production also produces a new range of artefacts. Pottery is introduced into Ireland for the first time. Farming itself introduces the saddle quern for grinding corn. New and different forms of flint tools and weapons are produced.

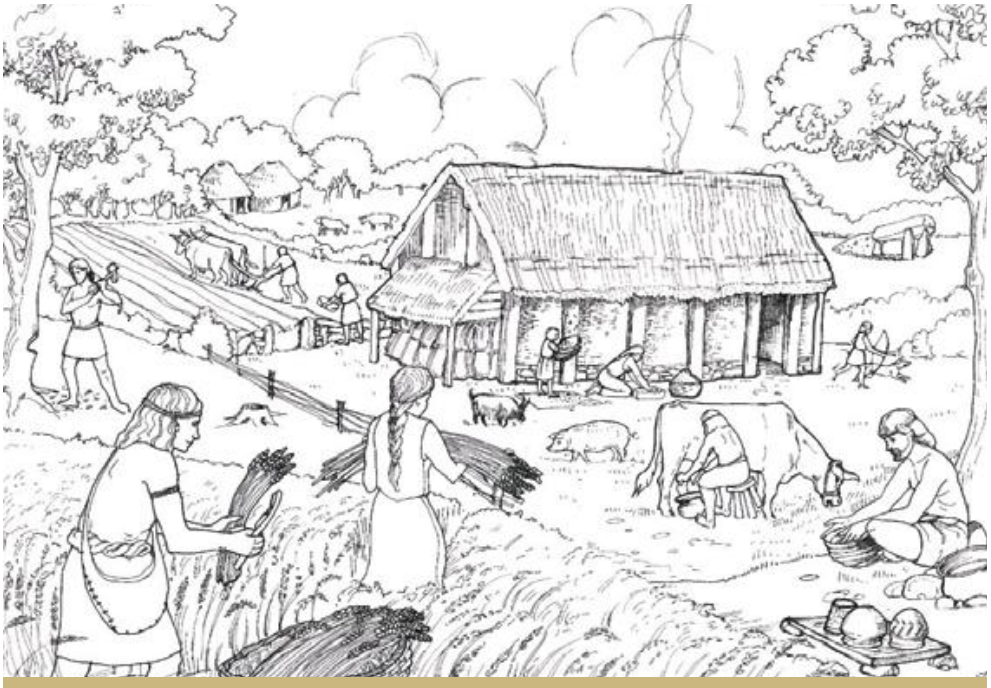
The big social change in the Neolithic is the sense that people now controlled their environment rather than being controlled by it. An important part of this ability was the manufacture of tools and with these the construction of houses, fenced enclosures, implements for ploughing land and reaping crops. This is the world that archaeologists are trying to discover and understand by examining what has survived from all of these activities.

Another feature of farming communities was the urge to expand into virgin territories. Over the millennia, between 7,000 B.C. and 4,000 B.C., the farming world spread up through central Europe along the Danube to the North Sea and Baltic coasts and along the Mediterranean to Iberia and north along the Atlantic coast. Whether this was a movement of people or ideas is much debated by archaeologists, but recent studies of ancient DNA sequences have brought new insights.

In the case of Ireland, the genetic evidence points to an influx of new people over a relatively short period of time around 3,800 B.C. These people had a strong British DNA signal but also show close affinity with Brittany and ultimately with Anatolia (modern Turkey). This evidence points towards the movement of farming communities into Britain from Northern France around 4,000 B.C. and from there into Ireland within a few hundred years. Whilst there is some indication of interaction between these new arrivals and the native hunter-gatherer populations, it wasn't long before the dark-skinned blue-eyed Mesolithic natives were



The diffusion of farming in Europe. Mapping by Dr. Elena Turk.



Reconstruction of Neolithic farmstead showing various farming activities. What artefacts might survive from these are the stone tools being used, like stone axes and flint blades, as well as the sherds of broken pottery vessels, and the postholes for the posts supporting the roof of the house. The only visible sign of all this life on the landscape today will be the megalithic tomb (background on the right). Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

replaced by new sallow-skinned dark-haired and dark-eyed Neolithic colonists. Thus, "the Neolithic package characterized by animal husbandry, cereal crops, ceramics, and timber houses reached the shores of Ireland some 5,000 years after its beginnings in the Near East"[1].

These new people, the farmers, were land greedy and soon they were clearing forest to create farmland. Their main tool for this clearance was the polished stone axe and the great number of these found in the country, some 20,000, indicates the extent of this clearance. Before long a substantial wooden house was the centre of a busy farming scene. Fields had to be ploughed to grow cereals, wheat, barley and oats. In autumn, sickles with flint blades reap the corn which is then ground in saddle querns. The great domestic utensil was the ceramic bowl and these farmers were adept potters.

The signature of the newly arrived farming communities was the building of megalithic tombs. These are prominent features on the landscape and were surely part of claiming a territory as one's own, where your ancestors are buried. Because farming communities were settled in one place all-year-round and had the ability to organise themselves around more than just food collection, Neolithic society is fundamentally different than what went before. Social systems develop to organise large-scale labour endeavours like the building of these tombs and the ritual rites that they embody. Time no longer had to be devoted to the search for food. There was time and food enough now to facilitate a workforce to build tombs and timber houses, as well as engage in all the various farm and craft activities that sustained communities.

But the distribution of Neolithic megalithic tombs across the country tells an interesting story. There are noticeable concentrations in the northern half of the country but they are very scarce in the south-west[2]. In County Cork there are just five examples: a passage tomb in Cape Clear and another on a rocky island in the Illen River near Baltimore, and three portal tombs, one on the Beara Peninsula, a second near Rosscarbery and a third in Cork Harbour at Rostellan. All of these are in coastal locations and it had been suggested that they represent a partial incursion by Neolithic communities into coastal Cork but no further inland. None of these tombs have been archaeologically excavated, further limiting what is known about Neolithic Cork.

That picture has now changed thanks largely to archaeological excavations in advance of pipelines, road schemes and other infrastructural developments[3]. As none of these features are visible on the ground they are only found through archaeological investigation such as

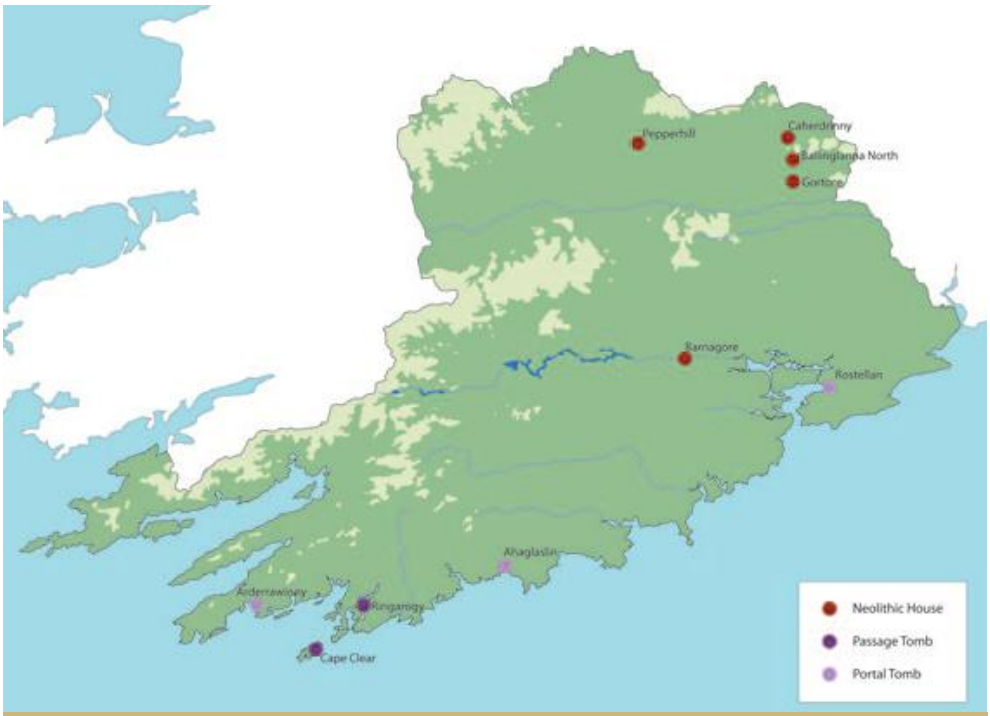
Archaeologist monitoring removal of sod by machine, searching for tell-tell signs of buried features or artefacts in the soil. Image courtesy of Eachtra Archaeological Projects & TII.

archaeological testing or monitoring when the top layer of soil is removed and telling stains in the ground or artefacts like stone tools and fragments of pottery (sherds) are recognised by monitoring archaeologists.

The most important Neolithic discoveries from these excavations are the foundation trenches belonging to rectangular wooden houses. The main concentration in Cork of these houses is between Fermoy and Mitchelstown with examples discovered in the townlands of Gortore (two), Ballinglanna North (two) and Caherdrinny (one). These are all close to the Funcheon River and there is evidence that Neolithic settlement was concentrated along the river valleys; no houses were found in the higher ground along the M8 motorway between Fermoy and Glanmire. Of course you do end up with a skewed distribution if all the discoveries are being made along the line of a road or a pipeline. There are lots more out there waiting to be discovered.

There is a distinct *Neolithic* package when we examine the archaeological monuments and artefacts that survive from this period. The most notable monuments are the megalithic tombs, described in the previous book in this series, *Archaeological Heritage of County Cork*.

Megalithic tombs of the Neolithic period are scarce on the ground anywhere in the south-west of Ireland and this must represent some social difference between the people who lived



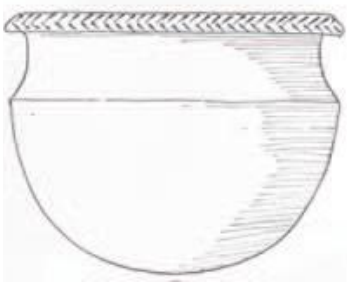
Distribution of Neolithic houses and megalithic tombs in Neolithic Cork. Mapping by Dr. Elena Turk.

Experimental archaeology- chopping down tree with polished stone axe.

here and those in the rest of the country. The people living in the Neolithic houses discovered by the various road and pipeline schemes in Cork, which were mainly around Cork City, East and North East Cork, do not belong to a society that built megalithic tombs. The handful of surviving Neolithic tombs in the county are in coastal locations in South and West Cork, some distance from where these houses were discovered in North and Mid Cork. In fact, there is very little evidence for how and where the Neolithic people in most of Cork buried their dead.

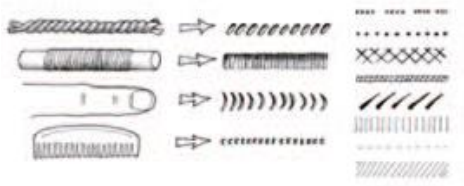
In terms of artefacts there is a continued use of flint in the manufacture of a wide variety of tools and weapons, but now of distinct Neolithic forms. As we saw in the previous chapter, polished stone axes were made and used in the Mesolithic but they become much more numerous in the Neolithic and were probably the main implement used in clearing woodland. Flint, the great stone for making a sharp cutting edge, is rarely used for axes as it is too brittle and shatters when used as a percussive tool. In consequence, axes are made from a great variety of stone types, but the preferred type is dense volcanic rock, like porcellanite. There is a source of this in county Antrim and while a great trade in axes developed from there, very few made it as far south as Cork. Instead, local stone was used like mudstone, shale and chert.

One of the most characteristic artefacts of the Neolithic, and one not seen at all in the Mesolithic, is pottery. In the early Neolithic period, there is evidence for a round-bottom bowl with a distinct shoulder (now termed a *carinated bowl* but was previously referred to by the more elaborate *Western Neolithic round-bottom shouldered bowl)*. The latter name shows its provenance is much wider than just Ireland and Britain and it is a signal fingerprint of early farming communities in Atlantic Europe. Towards the end of the Neolithic a new form of flat-bottomed pottery appears, known as *grooved ware*, which must indicate some change in how pottery was being used. Many of the pots are decorated with a variety of motifs giving a distinctiveness to individual pots while adhering to the use of regular motifs such as stab and drag, twisted cord impression and cross hatching.



Carinated round-bottomed Neolithic pot.

The finest surviving art from Neolithic Cork is the Cape Clear Stone; this is featured as an Exemplar in the

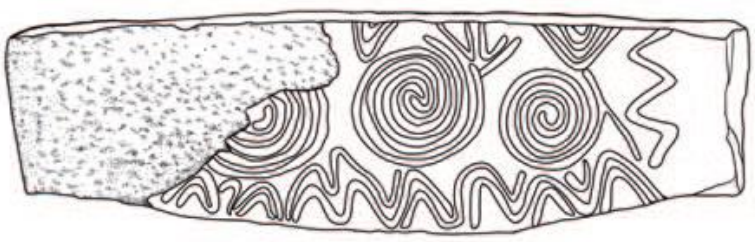


Decorative motifs used on Neolithic Pottery.

Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

previous book in this series. Neolithic people had time to be artists and we see that in the Cape Clear Stone, which is now in the collection of Cork Public Museum; strictly speaking the stone is part of a monument but can be treated as an artefact when removed from its original context. It probably came from a much-ruined *passage tomb* on Cape Clear Island. The carvers who decorated this stone were closely related to or the same as those who created the carved stones at Newgrange *passage tomb* in Co. Meath. There is only one other *passage tomb* in Cork and that is nearby on an island in the Illen River near Baltimore. Nothing like this stone or those tombs has been found anywhere else in the county and one wonders what these *passage tomb* people were doing in and around Roaringwater Bay some five thousand years ago.

Cape Clear Stone.



Entrance stone at Newgrange with same style of art as Cape Clear Stone.

ARTEFACT 5

Name: Polished Stone Axes
Location: Various parts of County Cork
Material: Mudstone, Shale, Chert.
Date: 3,800 - 2,000 B.C.
Period: Neolithic
Collection: Cork Public Museum
Size: Varying in length from 5 to 25 centimetres

Selection of polished stone axes from County Cork (in Cork Public Museum collection): from left: Clondrohid, Macroom; Galley Head near Clonakilty (top); Little Island (bottom); Carrigtohill; Ballinard near Ballineen; Mitchelstown. Image courtesy of Cork Public Museum

Of the 20,000 or so stone axes found in Ireland, with nearly 100 from county Cork, the vast majority are Neolithic in date and nearly all have a polished surface, so that a polished stone axe is one of the most emblematic artefacts of the Neolithic. Most are single stray finds from ploughed fields or peat cuttings but hoards have also been found. A cache of twenty axes was found in bogland near Ballydehob and another of eight axes from another nearby bog. Hoards like these are often found in a water context, like ponds or in rivers, and may have been votive offerings to an aquatic deity. Why these axes, which were well-made, much-used and valued artefacts, were discarded in this manner must be an indication that they were seen as something more than just utilitarian tools but had a deeper significance for these people.

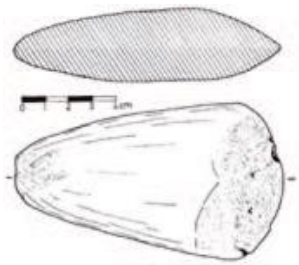
Axe with original pearwood handle found in county Fermanagh.

On a few rare occasions the handle of the axe has survived, and there is a fine example in pearwood from county Fermanagh, showing that the stone axe head was slotted into a hole near one end of the wooden shaft. Experiments in Denmark have shown that a hafted polished stone axe can fell a medium sized tree (under 35 centimetres in diameter) in 20 to 30 minutes. Since the advancement of Neolithic farming required the clearance of woodland this was a much used implement in the Neolithic.

The greatest concentration of axes is in the north-east of the country where two "axe factories" were active, at Tievebullagh Mountain in Co Antrim and on Rathlin Island. Here the local porcellanite rock makes an excellent axe and examples of these have been found throughout Ireland and Britain showing the extent of trade in the Neolithic. The total number of polished stone axes from Cork is just short of 100 and just a handful of these are porcellanite- otherwise the local stone, like mudstone, was used; flint is rarely used for axe heads because, though a very hard stone, it is brittle.

The number of polished-stone axes from Ireland outnumbers those from the entire island of Britain so axe production was a particular feature of the Irish Neolithic. Clearly the axe was a utilitarian implement but the fact that such great effort was taken to polish the entire axe and not just the cutting edge suggests these artefacts were held in high regard and much valued. The deposition of hordes of axes into rivers, lakes and ponds suggest a connection to an aquatic deity, perhaps both the axe and water symbolised the bounty of nature to the country's first farming communities.

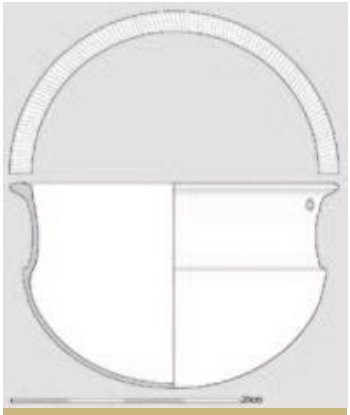
Polished stone axes are a symbol of man's power over nature and the single most transformative event in Irish history - the introduction of farming. We do not know how much of the post-glacial woodland was cleared at this time but the *Ceide Fields*, a vast network of fields enclosed by dry-stone walls in North Mayo, suggest that in places the clearance was extensive. This is also reflected in the thousands of the axes that have survived from the period.



Polished stone axe from Gortnagross, Cúil Aodha

ARTEFACT 6

Name: Carinated bowl
Location: Curraghprevin, Rathcormac
Material: Pottery
Date: 3,500 B.C.
Period: Neolithic
Collection: National Museum of Ireland
Size: Height: 17 centimetres; Width 26 centimetres



Reconstruction of carinated bowl from Curraghprevin.

Sherds of carinated bowl from Curraghprevin. Image courtesy of TII.

The farmers that colonised Ireland around 3,800 B.C. brought with them pottery of a particular shape and size; this is its first use in the country as Mesolithic people here did not use pottery. The first farmers made a distinctive pot now termed a *carinated bowl*; the same type of pot is found throughout Britain and further suggests close connections between the first farming communities on both islands - this has now been reinforced by the DNA evidence. The bowls are circular with a round bottom and a distinct shoulder (carination) and an open top slightly wider than the shoulder. They are well made, handmade pots with thin walls and a smooth surface and are reddish brown in colour.

The Curraghprevin pot, broken as it is into sherds, was found during the excavation of a pit on the M8 motorway scheme near Rathcormac. The report describes it as "an exceptionally elegant vessel with rim-top decoration of wide, slightly oblique, scores closely arranged in a radial pattern"; the pit produced a radiocarbon date of around 3,500 B.C.

Pits are a typical feature found in many archaeological investigations in advance of development. Because they are dug down into the boulder clay subsoil, pits will survive the ravages of the plough and are often the only intact features on a pre-historic site. Pits were often used as refuse dumps so can tell a lot about the everyday life of these ancient habitations; what people throw away tells you what they were using in the first place.

Only a handful of carinated bowls had been found in county Cork before the motorway schemes but now sherds from some 100 bowls have been identified, mostly in the vicinity of the Neolithic houses found between Fermoy and Mitchelstown, confirming the domestic nature of this pottery. A radiocarbon date range for these houses confirm they belong to the earliest phase of Neolithic activity in Cork (3,800 - 3,500 B.C.) and these bowls sit comfortably in that date range.

These bowls are domestic pottery and as we know only too well break fairly easily. That is what is found in archaeological excavations - broken fragments of pottery, called sherds. But because the style and form of pottery in the prehistoric period is fairly standard just a few sherds are often enough to reconstruct the profile and shape of the whole pot. Pots like these with round bottoms are likely to have been suspended - the Curraghprevin example above has perforations below the lip for that purpose.

What do the pots tell us? The makers were skilled craftsmen, though probably women. They were used as containers; the round bottoms and lugs suggest they may have been hung. Recent work on isotope analysis of the food residue on the inside of Irish Neolithic bowls is producing interesting results. It seems that milk was being boiled in these vessels at a high temperature so that "early farmers were doing other things with milk besides drinking it raw[4]." This evidence shows that dairying was part of Irish farming practice from its introduction in the Neolithic. Were these pots being used to make some form of cheese?

ARTEFACT 7

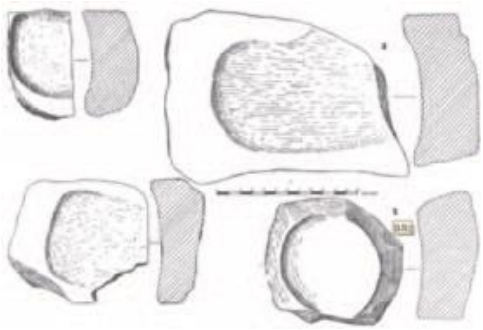
Name: Saddle quern
Location: Ballynamona, Mitchelstown
Material: Stone
Date: 3,000 B.C.
Period: Neolithic
Collection: National Museum of Ireland
Size: Length 50 centimetres;
Width 20 centimetres

Saddle quern bed-stone, with its dished grinding surface, from Ballynamona, Mitchelstown. Image courtesy of TII.

The first Neolithic farmers that arrived in Ireland around 3,800 B.C. brought with them seeds of wheat and barley, as well as cattle, sheep and goats. Wheat must be ground to extract flour and so as soon as farmers are planting and reaping corn they need saddle querns for grinding their wheat.

The saddle quern consists of two components, the upper-stone or *rubber-stone*, and the lower stone or *bed-stone*. Often just the lower stone survives, and it is called a *saddle* because of its shape. Because of the simplicity of their makeup, essentially just a flat stone with a dished upper surface, saddle querns are difficult to date on their form alone. But they had to be in use from the introduction of farming up to and probably beyond the introduction of the rotary quern in the Iron Age around the first century A.D. and there is evidence of their use well into the historic period.

Grinding corn on saddle quern with a rubber-stone. Drawing by Rhoda Cronin courtesy of TII.



Saddle querns from Moneen, Glanworth

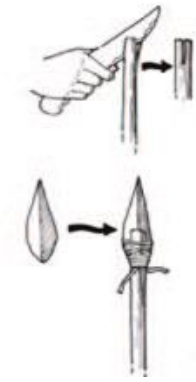
In his excavation at Moneen, near Glanworth, Professor Brian O'Kelly found five saddle querns in the cairn of stones covering the burial; the site has been radiocarbon dated to around 2,200 B.C. All five were broken and O'Kelly considered they were simply discarded stones handy for the cairn's makeup. Four rubber-stones were also recovered from the cairn.

Both saddle and rotary querns have a major disadvantage because they are made of stone. During the grinding process miniscule fragments of stone get into the flour. Eating bread made from this flour causes abrasion of teeth due to the tiny grains of stone from the quern being lodged in the bread; adult skeletons from the prehistoric period and well into the historic period have teeth worn smooth by the chewing of bread containing stone grit from flour ground in querns.

ARTEFACT 8

Name: Hollow-based Arrowhead
Location: Gortnahown, Mitchelstown
Material: Flint
Date: 4,000 – 2,000 B.C.
Period: Neolithic
Collection: National Museum of Ireland
Size: Length 4.5 centimetres; width at base 2.5 centimetres

Hollow-based flint arrowhead from Gortnahown, Mitchelstown. Image courtesy of TII.



Hafting a leaf-shaped arrowhead.

Leaf-shaped arrowhead, Meenane, Watergrasshill. Image courtesy of TII.

Though flint was not favoured in the manufacture of axe heads because it was too brittle, it was still very much favoured in the Neolithic for making implements that required a sharp edge and a point like arrowheads; hunting was still important for the Neolithic diet. The most typical Neolithic arrowheads are those with a hollow or concave base, like this example from Gortnahown, and those that are leaf-shaped, like the example pictured above from Meenane.

In general, Neolithic arrowheads are finely wrought and often little more than a few millimetres in thickness. A hollow-based arrowhead found in county Antrim still had its ash shaft attached. The end of the shaft was split, and the arrowhead fitted into the fork. Some remains of a resin to keep it in place were present and the head of the shaft was bound in animal sinew to keep it from splitting lengthways. Another shaft was found in a bog in county Laois, also of ash, with a leaf-shaped arrowhead at the tip.

Though probably normally used in hunting and fishing, a grim find from the archaeological excavation at Poulnabrone portal tomb in The Burren tells another story. Here the tip of an arrowhead was found embedded in the hip bone of a male skeleton. There are some other indications for warfare in Neolithic Ireland and elsewhere in Britain and the Continent.

During the archaeological excavation in Gortore, part of preparatory works on the M8 near Fermoy, an area was identified as an arrowhead production site, which produced "a large concentration of flint cores ... leaf-shaped arrowhead fragments, and arrowhead production flakes[5]". As there is no natural flint source in North Cork the cores (flint pebbles from which the arrowheads were formed by knapping) must have been brought in from the East Cork/West Waterford coast where they can be found washed-up on the beaches from an

offshore source. The excavators concluded that since "complete examples of arrowheads were not recovered, it would suggest that the arrowheads produced at this site were completed, hafted to the arrows and used elsewhere. The quality of the waste from arrowhead production hints at the presence of a skilled flint knapper[6]." The excavators considered this to be evidence of a once-off event rather than long term use as a workshop location.

Flint arrowheads survive from all periods in prehistory and are an interesting indicator of how life was lived at these times. It is impossible to tell just by looking at an arrowhead whether it was used for hunting animals or in warfare. In fact, the same bow-and-arrow can be used in either case. Like other implements from Neolithic times there is a great deal of uniformity in arrowhead manufacture implying that these were specialist productions and may have been traded goods as polished stone axes were.

As people settled in farms, cleared land for farming and began to store food for winter, they must have been vulnerable to attack. Similarly, the need for protection grows the more one has to protect. It seems the standard weapon in the Neolithic period was the bow and arrow and these arrowheads are the surviving evidence for the use of these weapons.

ARTEFACT 9

Name: End Scraper
Location: Gortnahown, Mitchelstown
Material: Flint
Date: 4,000- 2,500 B.C.
Period: Neolithic
Collection: National Museum of Ireland
Size: Length 2.5 centimetres; width 1.75 centimetres

End scraper, Gortnahone, Mitchelstown. Image courtesy of TII.

Another characteristic implement of the Irish Neolithic are flint *scrapers*. These are utilitarian tools used for things like cleaning animal hides, working wood and for any similar purpose that requires, as the name suggests, a surface to be scraped. They are small tools that fit between the thumb and the index finger and have one sharpened edge for the scraping. They come in two basic types, those with a concave edge (*hollow scrapers*) and with a convex edge (*thumb* or *end scrapers*).

Hollow scrapers are ideal for stripping bark from a piece of wood - perhaps one to be used as the shaft of an arrow - or for sharpening the end of a wooden or bone piece. They are more difficult to manufacture than end-scrapers and more specialised. The shape of the scraper

A drawing of two hollow scrapers from Gortore, Fermoy.

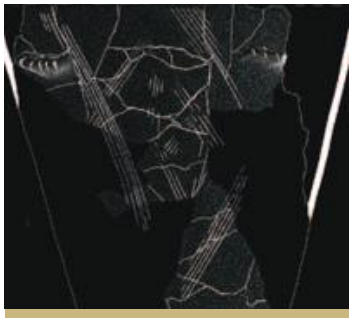
End-scraper being used to clean fat and hair from an animal hide.

suggests that whatever was being abraded by it was tubular in form to fit that shape.

End scrapers are more suited to stripping the hairs from the outside of a skin and the fatty tissue from its inside. Because of this heavy usage most scrapers show signs of re-touching, that is a delicate chipping at the working edge to re-sharpen it.

ARTEFACT 10

Name: Grooved Ware pot
Location: Coole Upper, Castlelyons
Material: pottery
Date: 3,000 – 2,500 B.C.
Period: Neolithic
Collection: National Museum of Ireland
Size: Height 22 centimetres;
Width at top 26 centimetres;
Width at base: 14 centimetres



Drawing of decoration on vessel from Coole Upper. Image courtesy of TII.

This well-preserved *Grooved Ware* vessel was discovered in Coole Upper near Castlelyons in 2009 during archaeological excavation in advance of a gas pipeline. It has four lugs near the top, two of which were perforated to allow the pot to be suspended. It is decorated with lines of incised markings or grooves - hence the type name.

One of the largest collections of this type of pottery in the country, sherds of at least 62 pots, comes from the M8 motorway excavation at Ballynacarriga, near Kilworth. The pottery consists of barrel-shaped, flat-bottomed pots of a high quality comparable to the best examples of this form of pottery anywhere in Ireland.

As the Neolithic progresses the pottery being produced becomes more decorated and the style more varied. By the later Neolithic period, 3,000–2500 B.C., a new form of pottery appears. This has a flat bottom and a "tub" shape, and the vessels are decorated with lines of stab marks or grooves, hence the name. This is generally termed *Grooved Ware* and appears to have first appeared in Orkney but rapidly spread from there throughout Britain and into Ireland. The spread is so rapid and so extensive it is assumed this represents more than just a new style of pottery but a new belief system with novel forms of ceremonial practice that include the use of these pots. The presence of this pottery on both sides of the Irish Sea suggests social contact across the sea in late Neolithic times along what were already probably established trade routes.

This type of pottery is widespread in Britain at this late stage in the later Neolithic and suggests either increased trade or social interaction between both islands at this time. The abandonment of the standard round-bottomed bowl for this type of flat-bottomed vessel is another indication of change in the use of pottery, perhaps in the way food is prepared and in diet.

Grooved Ware vessel, Coole Upper, Castlelyons. The pot did not survive entire so the missing parts are made-up in clay to create the full shape of the pot. Image courtesy of TII.

Prehistoric Pottery

Why are archaeologists obsessed with pottery? This question has often been asked but there are sound reasons for archaeologists studying pottery. Broken *sherds* of hand-made pots fired on a bonfire have durability in the ground so that on many archaeological excavations one of the most numerous *finds* are *sherds* of pottery. Pottery vessels were also favoured as *grave goods* in burials throughout the pre-historic period. Because pottery styles were fairly uniform over set periods of time they are a good indicator of the age of a *site* when found in a reliable context like in the foundation trench of a house or in a hearth. Before the advent of radiocarbon dating pottery styles were very important, when found, in approximating the age of archaeological features. Pottery studies are still an important part of archaeology and can still tell a lot about lifestyle and contacts between different social groups. They are also useful as indicators of where a settlement might be located when found in the soil.

Most archaeological excavations produce more fragments of pottery - *sherds* - than any other artefact. This is because, firstly, pottery survives very well in the ground over thousands of years. Secondly, bits of broken pottery are not of any value and so tend to be left behind as rubbish wherever people lived. The first people to use pottery in Ireland were Stone Age farmers of the Neolithic. Most of their pottery is coil-made and in the form of a broad-rimmed bowl.

The first requirement for making a pot is a source of suitable clay. The clay then had to be prepared

Making a pinch pot, stage 1

Making a pinch pot, stage 2

Decorating a pinch pot, stage 3

Making a coil pot, stage 1 – making the base

Making a coil pot, stage 2 – rolling out a coil

by removing any impurities from it and adding a 'temper' such as crushed stone or bits of grit. These prevented the pot from shrinking as it dried. The two main types of hand-pot were the *pinch pot* and a *coil pot* (see diagrams).

A pinch pot was made with a ball of clay and pinched into shape – a quick and useful technique to make a small pot.

Making a coil pot, stage 3 – laying coils on top of each other

Making a coil pot, stage 4 – attaching coils

The use of coils enabled the maker to make and shape larger pots. The clay was rolled into coils and laid on top of each other to the required shape and height. A favourite technique was then to 'burnish' the outside of the pot by rubbing it with some smooth implement until the surface had a polished appearance. The surface was also decorated with some simple geometric designs using a sharp point, a stamp or just a length of twisted cord. The pot was then left to dry. When it was dry the pot was fired where the clay is transformed to durable ceramic pottery. The pot was then ready for use.

Some types of prehistoric pottery were special, as they were reserved for placing in *megalithic tombs* or in underground *cist* or *pit graves* with the remains of the dead. This type of pottery is often referred to as 'funerary ware'. Pottery styles throughout the prehistoric period were produced to standard designs though these changed from age to age.

Hand-making clay pots.

Firing hand-made clay pots.

[1] Cassidy, L.M. et. al. (2016) 'Neolithic and Bronze Age migration to Ireland and establishment of the Atlantic genome', Proceedings of the National Academy of Sciences USA 113, 368-373

[2] For distribution maps of megalithic tombs see Historic Monument Viewer on www.archaeology.ie

[3] Johnston, P and Kiely, J. (eds), (2019) Hidden Voices: the archaeology of the M8, TII Heritage 7; Hanley, K and Hurley, M.F. (2013) Generations: The archaeology of five national road schemes in County Cork, NRA Scheme Monographs 13; Gowen, M. (1988) Three Irish Gas Pipelines, Wordwell

[4] Smyth, J. And Evershed, R.P. (2015) 'The molecules of meals: new insights into Neolithic foodways', PRIA 115, 43

[5] Johnston, P. and Kiely, J. (eds), (2019) Hidden Voices: the archaeology of the M8, TII Heritage 7, 104

[6] Ibid.

Chapter 5
Metals and New People
Late Neolithic/Early Bronze Age transition: The Chalcolithic (2,500 – 2,000 B.C.)

The transition from Neolithic to Bronze Age takes roughly five hundred years, during which period we see people that look backwards to the Stone Age but others that look forward to the times when metal will be king. Looking backwards is the building of megalithic tombs, but now in a new form - the *wedge tomb*. And looking forward is the mining of copper ore, firstly at Ross Island, Killarney, but not long afterwards in West Cork at sites like Mount Gabriel on the Mizen Peninsula. We now know from the study of ancient DNA that the last great immigration into Ireland during the prehistoric era occurred at this time. These new arrivals must have brought the knowledge of metals with them but how they interacted with the native Neolithic people is unclear at this early transitional period. What is certain is that change is coming and a great deal of it when the true extent of what the use of metal can achieve is realised.

DNA extracted from some Early Bronze Age burials in county Antrim have made it clear that "the great wave of genomic change which swept from above the Black Sea into Europe around 3000 B.C. washed all of the way to the northeast shore of its most westerly island[1]." There is evidence now from studies of ancient DNA that a great migration of people from the Russian steppe swept across Europe in the third millennium B.C. The artefact which maps this migration across Europe is *beaker pottery* and a particular form of pit burial that included beaker pottery amongst the accompanying grave goods. But in Ireland, at this time, we have wedge tombs which look back to Neolithic burial practices rather than the new fashion of pit burials. There is much debate amongst archaeologists as to how this new form of pottery was introduced into Ireland and what exactly it was used for; was it the product of a new cult involving the drinking of alcohol, as some archaeologists have suggested? We know that the growing of barley is more common in the Bronze Age than in the Neolithic - is the pint-of-plain another part of Irish heritage that owes its origins to these Bronze Age forefathers?

A beaker pot with its curved form and geometric patterns of layered ornament.

The first excavation in county Cork to produce sherds of beaker pottery was Professor O'Kelly's dig at Moneen, near Glanworth, in 1948[2]. This is a complicated site and somewhat unique in its form. The earliest phase, a short-lived occupation of the site, has been radiocarbon dated to around 2,450 B.C. It is this early phase that produced the sherds of beaker pottery. The number of excavations that have produced beaker pottery in the

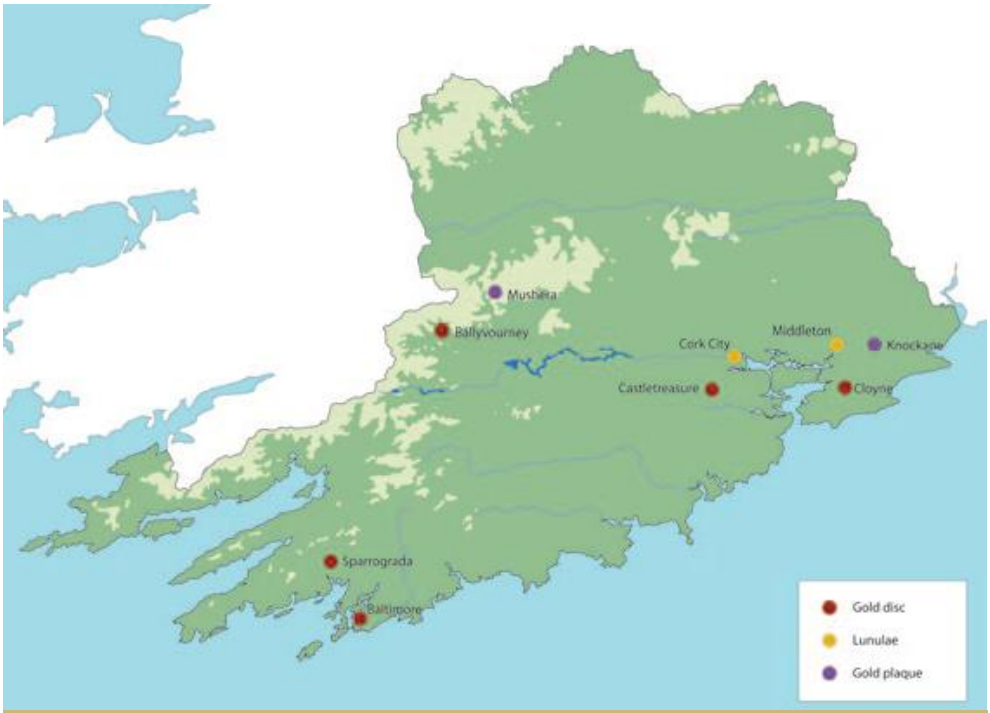
Beaker pot from Moneen, Glanworth.

county is now around a dozen, nearly all discovered by archaeologists during recent motorway and infrastructural developments.

A characteristic feature of a site that produces beaker pottery is no clear evidence for houses, as there is for Neolithic settlements. Rather, these sites consist of a scatter of pits filled with a miscellany of items that often look like discarded rubbish. The impression given is that sites where beaker pottery was used were more like temporary encampments rather that permanent settlements.

But the most characteristic Cork monument of the Neolithic/Bronze Age transition is the wedge tomb. Four wedge tombs have been archaeologically excavated in the county of Cork; these are described in the preceding book in this series, *Archaeological Heritage of County Cork*. The finds from these excavations have been fairly sparse and there isn't any display of wealth in the grave goods, for whatever reason. All of these tombs were disturbed and re-used in later prehistory and seemed to have remained places of veneration long after they were constructed. This continued reverence is an interesting part of their history but the disturbance caused by later inserted burials and votive offerings often disturbed original depositions.

Copper and gold are the first two metals to appear in the archaeological record. Gold obviously



Map of early gold finds from County Cork. Mapping by Elena Turk.

is a decorative metal but this also seems to have been the initial role of copper as it is a soft metal and in itself no improvement on flint as a tool or weapon. But it is attractive when freshly minted and polished and whilst the earliest artefacts made of copper are axe heads they may have been valued more as exotic keepsakes than useful tools. Once knowledge of copper and how it is found in ore reached the south-west of Ireland, copper mines were quickly in operation. During the Neolithic Cork suffered from a scarcity of a vital natural resource - flint. But now in the Bronze Age it has an important natural resource - copper ore.

The first active mine was probably that on Ross Island near Killarney but before long prospectors were identifying veins of copper ore in West Cork and a remarkable series of early mines survive on the eastern shoulder of Mount Gabriel, just north of Schull. The miners in Killarney used Beaker pottery but it is noticeably absent at Mount Gabriel and in the two wedge tombs Prof O'Brien excavated nearby at Altar and Toormore where it might be expected to have appeared. The difficulty of trying to make sense of Beaker pottery was recently described colourfully by an eminent professor of archaeology as "an interpretive nightmare devised to torment any archaeologist who has the misfortune to work in ... the morass of Beaker-ology.[3]"

But whatever its nature, change was coming to the Cork area from around 2,500 B.C. There is an increase in population, in agriculture, in production and in wealth, the latter most noticeably with the appearance of high-status gold objects. Cork is rich in early gold objects, and though the number of objects is small, just a dozen or so, "this represents the highest concentration of early gold-work found in Ireland[4]." The gold objects are six discs, three lunulae, two (or three) foil plaques and a pin. There are three concentrations: the Baltimore area of West Cork (two), the upper reaches of the Lee Valley (three) and Cork Harbour/East Cork (six). Mary Cahill of the National Museum of Ireland considers these as "of such a high standard of workmanship that it strongly suggests a developed expertise in fine metalworking" in the Cork area at this time and that there was "a population to whom gold was an important commodity[5]." Thus, Cork's first Golden Age begins and would continue to flourish throughout the second millennium B.C.

ARTEFACT 11

Name: Copper Axes
Location: Castletownroche
Material: Copper
Date: 2,400 B.C.
Period: Chalcolithic
Collection: Ashmolean Museum, Oxford
Size: Length: 17 centimetres; max. width 9 centimetres

Pair of early copper axes from Castletownroche. © Ashmolean Museum.

In 1860 a Mr. Charles Fortnum displayed a number of items to The Archaeological Society in London that included "four copper celts of the most simple form; massive and unusually thick, found at Castletown Roche, county Cork.[6]" Nothing more is known about where they were found or the circumstances of the discovery; this unfortunately is the case with many artefacts found in the 19th century where just a general location is all that is known. In 1899 two of the axes were donated to the Ashmolean Museum in Oxford by Fortnum where they are still kept; the whereabouts of the other two axes is no longer known.

Dating simple axes like this is difficult, especially without any knowledge of their context. The axe on the left, the one with the straighter edge, has parallels in western France and northern Iberia from around 2,500 B.C., but not in Britain, and it may be an import from that region. O'Brien has pointed out that the axe on the right, with the more rounded edges, "is typical of the earlier axeheads made with the copper from Ross Island mine in Killarney[7]." In any case these two copper axes belong to the very earliest phase of metallurgy in Cork, a technology that will increase greatly in its sophistication through the second millennium B.C.

There are three other hoards of early copper axes from County Cork. Four axes were found in a quarry in Ballybeg, Buttevant, in 1870, but only one of these has survived in the collection of the National Museum of Ireland. An even bigger hoard of copper axes, twenty five in total, was found in a bog near Cappeen in 1911 by turf cutters. The hoard was sold to a collector in Cork; two of these are now in the National Museum of Ireland but the location of the rest is unknown. The fourth hoard of six axes is also from the Cappeen area. These axes were bought by Robert Day, the noted Cork collector, who later presented them to the National Museum of Ireland. These axes were made of copper mined at Ross Island, Killarney and show that by about 2,300 B.C. the copper industry in the South-west was well underway. There have also been about a dozen single finds of copper axes in the county.

Copper is a soft metal but highly attractive when polished. It was probably prized at first for its appearance rather than for its utilitarian use as a tool. Simple copper axes like these were

Drawing of the Castletownroche axes.

Cappeen hoard of copper axes © National Museum of Ireland.

probably first brought in or traded into the country as luxury goods, prized more for their unusual material and appearance than what they could be used for. But the people who brought them in soon discovered that there was copper ore in the south-west of Ireland and before long a thriving copper mine was operating at Ross Island, Killarney. A series of primitive copper mines from this period survive on the eastern slope of Mount Gabriel, on the Mizen Peninsula. But copper alone changed little. It was the alloying of copper with tin to make bronze that made all the difference and heralded the Bronze Age.

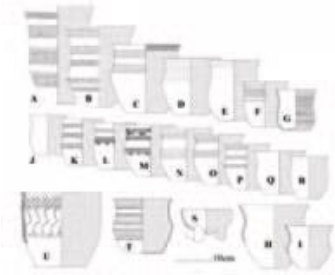
ARTEFACT 12

Name: Beaker Pot
Location: Carrigrohane, Ballincollig
Material: Fired clay
Date: 2,450 B.C.
Period: Chalcolithic
Collection: National Museum of Ireland

Sherds of Beaker pottery from excavation at Carrigrohane, Ballincollig. Image courtesy of TII.

Archaeological monitoring in Carrigrohane townland as part of preparatory works on the N22 Ballincollig by-pass discovered a pit that when excavated produced 65 sherds of beaker pottery representing the remains of two finely made pots. These beaker pots have a gentle S-shaped outline and are decorated with horizontal bands of impressed decoration. Charcoal from the pit had a radiocarbon date of around 2,450 B.C., consistent with this type of pottery.

Cord-impressed beaker showing usual size of pot.



Typical typology of Irish beaker pots[9].

According to the excavation report "this is a significant addition to the relatively limited number of beaker sites found in southwest Ireland ... and as one of the first beaker assemblages ... to be found in County Cork, has helped to substantially alter our understanding of prehistoric society in this region.[8]" In other words, up to this discovery beaker pottery was very scarce in the Cork region but this shows that people making beaker pottery were present in the area in some significant fashion.

No other type of prehistoric pottery has been subject to more typological study than beakers. Though all these pots across Europe have general characteristics in common (size, profile, colour) there is a great deal of variation in the way they are decorated, be this with horizontal bands of zig-zag lines, bands of cord impressions, filled triangles or stab-and-drag marks, etc. Grouping these into stylistic types has produced a myriad of typologies, many related to the pots found in a particular region. Since Beaker pots are pan-European in style it shows strong influence coming into the Cork area during this period. Whether this influence came in with new people or just a new fashion is a matter of conjecture.

ARTEFACT 13

Name: Female skull
Location: Labbacallee Wedge Tomb, Glanworth
Material: Bone
Date: c. 2,200 B.C.
Period: Chalcolithic
Collection: National Museum of Ireland

Adult female skull from Labbacallee.

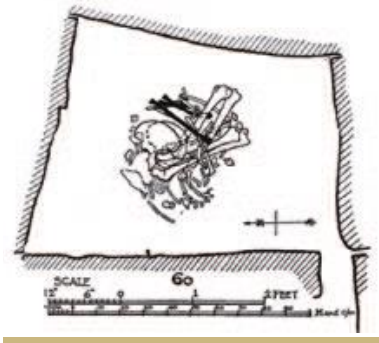
Labbacallee was the first scientific excavation of a megalithic tomb in the county. It is located in North Cork, close to Glanworth on the north side of the road leading to Fermoy. It was excavated in 1934 as part of the Relief of Unemployment scheme, which funded many archaeological excavations in its time. The excavation was in advance of a conservation programme by the Office of Public Works as the tomb is a National Monument in the ownership of the State - a monument well worth a visit.

The removal of the large covering slabs revealed an interior divided into two compartments, the smaller one at the eastern end cut-off by a stone slab from the larger. It was clear that the larger chamber had been disturbed over time by both human and animal activity, but the fragmentary remains of a young male adult and a child were found as well as an adult female skull. The smaller chamber was less disturbed by later activity and on its floor was the bones of a headless adult female skeleton. Anatomical examination showed that the female skull in the main chamber belonged to the body in the smaller chamber. The skeleton bones were arranged in such a fashion that they had to be at least partially decomposed when placed in the tomb.

View of tomb from the public road.

Why this bizarre arrangement of human remains in the tomb is a matter of conjecture, but it was deliberate and must have been significant to those who made that arrangement in this tomb that itself is a construction of some magnificence. Recent radiocarbon date for the female burial dates it around 2,300 B.C., a date compatible with the building of the tomb.

How these three people in the tomb were related we do not know but DNA analysis would reveal this relationship. DNA analysis of human bones from other megalithic tombs in Ireland has shown that the groups buried in the tomb were closely related and suggest an amount of close interbreeding in these family groups. This suggests that the three people buried in Labbacallee were closely related if not from a single-family unit. The construction of these tombs required significant social organisation, a large labour force and significant skill in moving very large stones. The tombs were built according to strict rules of design especially regarding their orientation that always faced to the south-west.

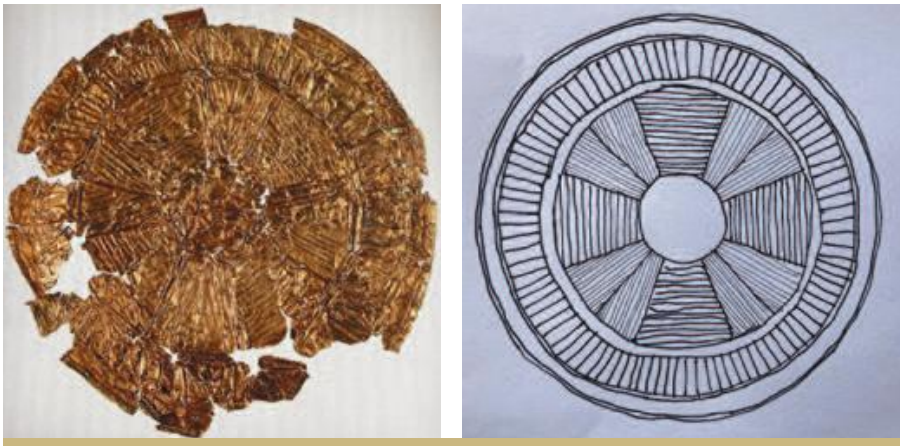


Plan of headless burial in rear chamber at Labbacallee.

Only DNA analysis will tell us the relationship between the three individuals buried in this tomb. The fact that the woman's head was is a separate compartment must have a meaning and it must also be significant that her body was not buried directly into the tomb but only deposited there after it had been allowed to decompose (the bones are in a jumbled condition). In any case, the construction of her and her companion's tomb required the type of effort that only very important people could attract, but what that *importance* was we can only guess at.

ARTEFACT 14

Name: Gold Disc
Location: Sparrograda, Ballydehob
Material: Gold
Date: 2,200 B.C.
Period: Chalcolithic/Early Bronze Age
Collection: National Museum of Ireland
Size: Diameter: 5.5 centimetres



Gold disc from Sparrograda, Ballydehob. Photo © National Museum of Ireland.

This tiny gold disc (diameter just 4 centimetres) was found by quarrymen near Ballydehob in 1844 in the cleft of a rock, "covered carefully with earth and a rude pavement of stones[10]". Found with it were "two or three similar pieces [which] were destroyed in a fire by the workmen when they were testing the metal to see if it was gold[11]." Also found was a bronze bracelet, which survives but is broken in five pieces. Both the plaque and the bracelet were purchased from the landowner by Robert Day for his collection and they are now in the National Museum of Ireland.

The disc was made of very thin gold with impressed (pushed up from the other side) decoration and parts of it have been lost. The centre is a blank circle surrounded by a cruciform motif with horizontal bands. Between the arms of the cruciform is a linear pattern of impressed

Two gold disks from Cloyne. © National Museum of Ireland.

lines. The outer rim of the disc has impressed circular lines between which are close-set radial lines. Unlike similar discs it does not have a pair of perforations; Mary Cahill suggests that "its function must have been to cover a domed button or stud[12]." This contrasts with most discs which have two holes near the centre, as can be seen in the Cloyne disc, suggesting they were sewn onto something.

The technique of its design and construction have been compared with that of the Knockane plaque (Artefact 16) and have been compared with similar workmanship on gold items from the Wessex area in England.

Six gold discs have been found in County Cork: Sparrograda, Ballydehob; 2 from Cloyne; Castletreasure, Donnybrook; Baltimore and Ballyvourney. Five of these are in the collection of the National Museum of Ireland but the Castletreasure disc is in the British Museum.

Gold discs are generally agreed to be representations of the sun and part of a sun-worship cult that prevailed throughout much of Europe in the early Bronze Age. The pair of perforated holes, though these don't occur on all examples, indicates their attachment to something, perhaps clothing. The fact that they are often found as a pair, like the examples from Cloyne, has led to the suggestion they may be representations of the day and night suns, symbols known from Swedish rock art of the Bronze Age. The cross on the Castletreasure disc is repeated on other discs from outside Cork and is often seen on depictions of the sun on Scandinavian Bronze Age rock art. It has been suggested that the arms of the cross represent the life-giving rays of the sun.

Gold discs also appear to have a close connection to lunula - see next Artefact.

Robert Day (1836-1914)

In the age before State-funded museums the collection and curation of ancient artefacts fell to private collectors. In Cork the most prolific collector was Robert Day and many of the most important treasures of the county's past have survived because he saved them from being lost or melted down for their bullion value. As well as being a noted antiquarian, Day was also prominent in the business and social life of Cork city, serving as an alderman and High Sheriff in the 1880s.

As a collector Day "gained a reputation as a readily accessible and likely purchaser of objects no matter what level of society the seller came from[19]", and so whenever something of interest was found, be it by a labourer or a landowner, he was often the first port of call as a likely purchaser. His collecting had its controversial side and "some of his collecting activities were the subject of inquiries by State authorities when, in his anxiety to acquire material for his collection, he over-stepped the mark and ignored contemporary legal procedures as they related to Treasure Trove." However, there is no doubt that "in the era before publicly funded museums, collectors effectively salvaged the material culture of our history[20]."

He joined the *Cork Historical and Archaeological Society* when it was founded in 1891 and served as its president from 1894 until his death in 1914. He published regularly in the journal and often exhibited items from his collection at Society meetings.

He died at his residence Myrtle Hill House and shortly afterwards this was the location for the sale of his vast collection in 1,500 lots. Though this collection was scattered by the auction parts of it ended in public museums in Ireland and Britain.

ARTEFACT 15

Name: Lunula
Location: (in vicinity of) Midleton
Material: Gold
Date: 2,000 B.C.
Period: Chalcolithic/Early Bronze Age
Collection: Ashmolean Museum, Oxford
Size: Diameter: 21 centimetres

Lunula from Midleton area.
© Ashmolean Museum.

Lunulae (the term is derived from the Latin for moon) are the most iconic of the gold ornaments produced in Ireland in the Early Bronze Age; of the hundred or so surviving examples, some eighty were found in Ireland and most of the rest in Britain. Four, and possibly five, are from the county of Cork. Two were found in a field near Midleton (with possibly a third) and two more in the vicinity of Cork city. These are 19th century finds and bought at the time by collectors so that all have ended up abroad, three in the Ashmolean Museum in Oxford and the fourth in The Detroit Institute of Art, U.S.A.

Lunulae are an indigenous Irish product though a number have been found in Britain and the Continent presumably traded there as luxury goods; the concentrations are in western Britain and Brittany, two areas with strong connections to Bronze Age Ireland. They are crescentic collars made of thin sheets of beaten gold; the name comes from their lunar shape. At the tip of each end are expanded terminals twisted at a right angle to the plane of the collar. It is not clear how these functioned as they don't really clasp each other in an obvious manner; perhaps they were tied together with string.

Lunula worn as neck ornament and gold dress fastener. Drawing by Rhoda Cronin.

One side of the lunula is decorated with incised lines but the decoration is confined to the "horns" of the crescent and along the entire edge of the collar; this suggests they are viewed only on that side like a collar. The motifs are geometric arrangements of zig-zag lines: triangles, lozenges and chevrons. Symmetry is important so that the decoration on each "horn" is a copy of that on the other. The workmanship on these is very fine and lunulae are superb examples of sheet gold craftsmanship. They are also a very effective way of creating the maximum display from a small amount of gold.

They have generally been regarded as an ornament

Detail of decoration on "horn" of the Midleton lunula. © Ashmolean Museum.

worn like a breastplate. If worn at all this was very seldom as none show signs of wear; it has even been suggested that they were adornments for statue idols such is their pristine state. None have been found with burials as grave goods which suggest they were not items of personal use. They were treasured items and one, found in county Cavan, was contained in a two-piece specially-made oak box.

In a recent article in *Archaeology Ireland*, Mary Cahill, National Museum of Ireland, argued that gold discs, which occur often in pairs, and lunulae, were symbols of the solar boat (the lunula) and the day and night sun (the two disks) as depicted on Bronze Age rock carvings in Sweden. Here "the sun is carried on a boat so that it can complete its diurnal and nocturnal circuit of the earth and the underworld.[13]" The boats have upturned ends like a lunulae and the sun is often decorated with a cross as are many gold discs.

An important discovery of a lunula with two gold discs in Coggalbeg, Roscommon, further underlines the connection of these two items as part of the same regalia. There may also be more to the symbolism than just its solar significance. If the two gold discs were worn below the collar on the chest of a queen they may also have a meaning related to fertility, often an important consideration for prehistoric cults.

Lunula from vicinity of Cork city. © Ashmolean Museum

Lunula and pair of gold discs from Coggalbeg, Co Roscommon, "re-imagined as a solar boat with the day and night sun ". © National Museum of Ireland.

Sun worship is well attested to in Bronze Age Cork, nearly all the ritual monuments from the period are orientated to the south west - the direction of the mid-winter setting sun, most famously at the stone circle in Drombeg, Glandore, which is orientated on the mid-winter solstice at sun-set. It is hardly surprising that primitive farming communities held the sun in special regard. They were well aware that the seasonal movement of the sun in the sky was vital to their survival, ensuring that crops grew and ripened when they should; the sun was their calendar and their god.

ARTEFACT 16

Name: Gold Plaque
Location: Knockane, Castlemartyr
Material: Gold
Date: 2,200 B.C.
Period: Chalcolithic/Early Bronze Age
Collection: National Museum of Ireland
Size: Length: 5.8 centimetres; max. width: 3.75 centimetres

Gold plaque from Knockane, Castlemartyr. © National Museum of Ireland.

In 1805 a man working in a quarry near Castlemartyr lost his crowbar into a fissure in the rock. Whilst trying to retrieve his crowbar the man made a remarkable discovery. When he widened the opening he found "a human skeleton partly shrouded in a winding sheet of corrugated and embossed plates of pure gold connected by bits of wire.[15]" If that discovery had been made in more enlightened times it would now be one of the greatest Treasures of Ireland. Instead all that survives is one very small plaque of gold (5.8 centimetres in length, 3.75 centimetres at wider end, 2.5 centimetres at narrow end), now in the collection of the National Museum of Ireland.

The discovery is described by the Youghal architect and antiquarian Edward Fitzgerald (1820-1893) in his book *Vestiges and relics of remarkable Irishmen in the vicinity of Youghal, of the primeval and pagan period*, published in 1858, as follows:

"Another circumstance which I wish particularly to bring to your attention is, that in 1805 a man was quarrying on Knockane, close to the present coach road, and nearly opposite Ballindinas gate, his crowbar fell from him into a fissure in the rock, following his implement he widened the opening and got in to search for it; but what was his amazement to behold before him, a human skeleton partly shrouded in a winding sheet of corrugated and embossed plates of pure gold connected by bits of wire; he also found some amber beads. I have a sketch of a portion of the gold among my illustrations full size which Mr. Leckey of Cork has in his cabinet when the sketch was made ... A few weeks since I was making some researches respecting the

cave where the skeleton was discovered and when shown the opening in the rock inquired its name which I found was always known as Carrig-na-huagha, that is, the rock of the grave."

Unfortunately, apart from the surviving plaque, the gold was melted down by a local jeweller at the time - apparently there was enough gold to half fill a coal scuttle! The plaque survives because it came into the possession of Thomas Crofton Croker from Richard Caulfield, two noted 19th century scholars of Cork's past; Caulfield having received it from a man in Cloyne who somehow had acquired it. One of the amber beads from the burial also survives in the National Museum of Ireland via Cannon Patrick Power who purchased it in the sale of Robert Day's collection.

The plaque is trapezoidal in shape. The technique of its design and construction are very similar to that of the Sparrograda gold disk (Artefact 14) and both have been compared with similar workmanship on gold items from Bronze Age burials in the Wessex area in England[16].

The decoration on the plaque consists of five individual sections separated by a raised line. Slanted lines have been raised across each section in opposing directions forming a continuous zig-zag pattern; this is a technique known as *reversible relief*.

Evidence for "rich burials" like this one in Knockane in the Early Bronze Age has been interpreted as evidence for "the emergence of powerful individuals or groups whose position was linked to their controlling interest in the supply of metal[17]."

Prehistoric Irish Gold

Ireland is justly famed for the richness of its Bronze Age gold artefacts and the National Museum of Ireland's collection of gold objects is one of the richest in Europe; the display is spectacular and well worth a visit. From the very beginning of its discovery and use gold has been a prized material, highly valued throughout the world. Three factors contribute to its appeal: It is very attractive in appearance; it is rare, and it is malleable so relatively easy to work. But it is also enduring and does not corrode. When placed in the hands of a skilled smith an artefact of enduring beauty and great value is created.

Its symbolic nature is also an enduring feature of gold. In the Bronze Age its gleaming countenance placed it in the context of sun-worship, especially in the form of lunulae and gold discs. We can see from the exquisite nature of these ornaments that having them displayed on your person had a special meaning. But it is in the late Bronze Age (950-800 B.C.) that the bulk of Ireland's gold objects were produced. A lot of these finds come from hoards buried in bogs, like the hoard from Cappeen (Chapter 7).

But where did all this gold come from? This issue was hotly debated in the 1970s and to try and find its source a joint project was established between archaeologists and geologists. Provisional results have found a likely source in the streams on the western side of the Mourne Mountains in county Down. This is not an area renowned for finds of gold artefacts but, according to the researchers, "the use and deposition of ornaments made of that gold would be expected in areas of rich farming and settlement[18]."

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Chapter 6
The Age of Metal
The Bronze Age (2,000 B.C. – 1500 B.C.)

An important factor that defines the Bronze Age in Ireland, and in particular counties Cork and Kerry, is that it had a valued raw material in abundance - copper ore. If this wasn't the main reason for the great migration into Ireland in the Early Bronze Age, it certainly would have caught the attention of these settlers who came from areas in Europe already using metal. The knowledge of metal also brought with it a certain mystique, not only with gold but also copper and bronze. There is evidence that the goldsmith and the bronzesmith had a special role and place in Bronze Age society and were valued as if they possessed some special magic - which in a sense they did.

The mining, smelting and production of copper artefacts did not in itself revolutionise life in the Early Bronze Age. Copper is a soft metal; does not keep a sharp edge very well and was probably valued more as a luxury material than a useful one when first introduced. But the alloying of copper with tin, and later with lead, was a technological revolution. This new alloy metal, bronze, was hard; kept an edge and was easily fashioned into any number of new forms for both domestic and military use.

The nearest source of tin was Cornwall and a trade had to exist between there and Ireland to judge by the number of bronze objects that began to appear in the archaeological record by 2,000 B.C. The most direct evidence of this contact is the three Lunulae (see Chapter 4) of classic Irish form found in Cornwall. A number have also been found in Brittany further suggesting a line of exchange and/or gift giving, between the north-west of France; the south-west of England and Ireland in the Bronze Age. Tin for luxury gold objects was an obvious form of exchange but there may also have been cultural links related to the mass migration of peoples across Europe in the late third millennium B.C. as revealed by recent genetic studies.

The new metals were more than just another new material to make things from. They were also part of the social fabric and were incorporated into people's belief systems. Already hoards of copper axes were deposited into a river or a pond or a peat bog, as votive offerings; the two copper axe hoards from the Cappeen area were both found in a bog. This practice of placing an object or a group of objects in a watery context has left us a great treasure of Bronze Age artefacts that otherwise would probably have been melted down for recasting. We are also fortunate that bronze survives in wet conditions; there are far fewer hoards from the Iron Age, possibly because iron will rust and corrode when wet.

In 1990, during the excavation of the wedge tomb at Toormore on the Mizen Peninsula, a small deposit (or hoard) was found deliberately placed at the front of the tomb. This consisted of a bronze axe placed on top of two lumps of raw copper. The offering is associated with a

radiocarbon date of around 1,750 B.C. and clearly demonstrates the importance of copper and bronze to the people who built this tomb for the revered dead.

In the case of the Toormore axe the copper used in its manufacture was mined in Ross Island, Killarney, but this is also the time when copper mining was underway in West Cork. William O'Brien, the excavator of Toormore tomb also excavated a number of the mines on nearby Mount Gabriel. The process of how the metal was mined and processed is discussed in the previous volume in this series, *The Archaeological Heritage of County Cork*. The process involved lighting a fire against the rock face which shattered the rock. This rock was then pounded into smaller pieces using rounded boulders collected from nearby beaches. This crushed ore was then carried away to be smelted into copper elsewhere.

One remarkable find made at Mount Gabriel is a shovel made of alder wood. This was preserved because the mines became flooded and organic material like wood will survive in water, which excludes all the organisms that cause wood decay.

Tangible evidence for the manufacture of copper and bronze artefacts is the open stone moulds into which the molten metal was poured into a pre-shaped matrix (carved depression in rock in shape of object to be cast). These moulds vary from stones like that found in Kilcronat with just a single matrix for an axe on one surface to more sophisticated examples like the Doonour mould which has a matrix on all six sides of a rectangular block, with one side having two impressions. As we will see later, the technology of casting became more sophisticated in the later Bronze Age, as the implements themselves became more complex.

Single burial consisting of a crouched inhumation in cist with food vessels and pygmy cup and other grave goods. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

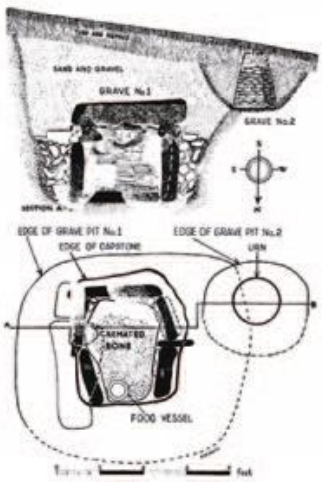
The practice of communal burial in over-ground megalithic tombs dies out early in the second millennium B.C. and is replaced by the single burial tradition. These burials are termed "single" not because there was a single body involved but because the act of burial was a single event.

The earliest form of this burial tradition was to place the body or bodies in a stone-lined compartment or cist dug into the ground. Many of the burials in these stone cists were crouched inhumations. Over time cremation became more popular with the burnt bones placed on a flat stone at the bottom of a pit and a large pottery urn inverted over the remains.

We can see both forms of burial in the discovery made in a sand pit in Labbamolaga in 1948. In the bottom of a pit four feet deep was a stone cist in which the cremated remains of a male,

Bronze Age pit burial in preparation with cremation underway in background. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

Food Vessels from Bronze Age burials in Cork: (from left) Labbamollaga; Ballynahow and Bealick. Burials preserved pots like these that otherwise would have long ago been broken and discarded. Image courtesy of Cork Public Museum



Plan and section of cist and pit burials at Labbamolaga, North Cork.

female and child were placed. Accompanying the cremated remains was a *food vessel*. At some time later a shallow pit was dug to the side of the first pit and an urn placed in it covering cremated bones. Unfortunately, during the unexpected discovery of this burial by quarry workmen, the cremated remains were scattered and lost. O'Kelly, who recorded the find, thought there was not much time between the two burials[1] and there is plenty of evidence from other Bronze Age burial sites that people came back to the same site over time to inter their dead. There is also evidence for burials being located close together in the form of a cemetery. One of these cemeteries was discovered in the townland of Ballyenahan North, Kildorrery, in the 1950s[2].

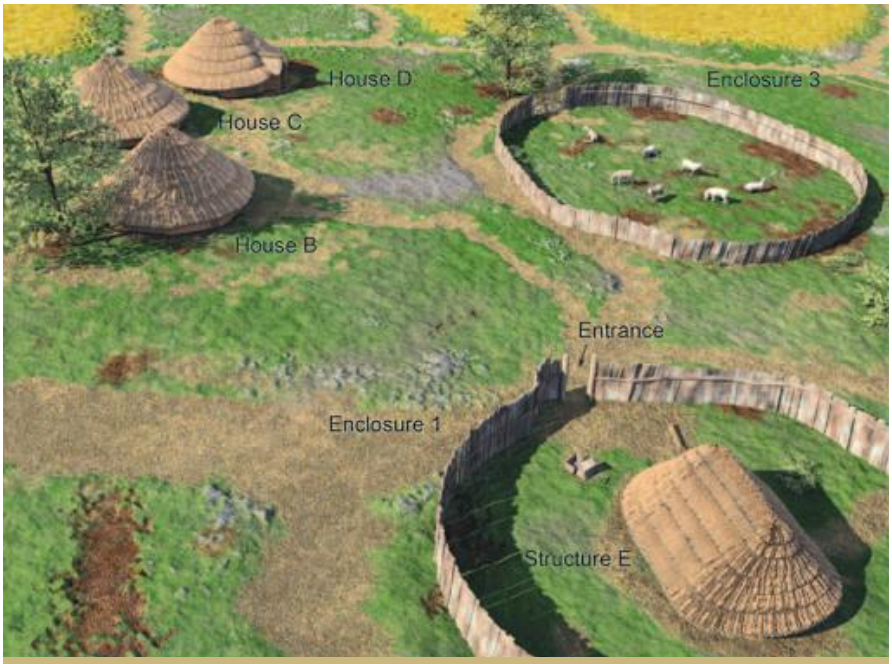
In almost all cases these single burials are accompanied by at least one pottery vessel. These pots change as well over time. The earlier *food vessels* were placed in the cist beside the body whether a cremation or an inhumation; presumably as the name suggests as food for the dead on their journey to the underworld. Not all *cists* were underground as some were over-ground and covered by a mound of earth (*tumulus*) or a dump of stones (*cairn*). The latter were often placed on a hill-top; the largest cairn of this type in County Cork is on top of Corrin Hill overlooking Fermoy. In the later burial tradition, a larger *urn* was inverted over cremated remains that were placed at the bottom of a simple pit without any stone surround. Both the underground cist and the pit burials have no over-ground markers and so are usually found only by accident during quarrying, agricultural activity, or investigations in advance of development.

Cordoned Urn from burial pit at Oatencake, Midleton. Image courtesy of Cork Public Museum.

The urn burial at Oatencake, Midleton, was discovered during field drainage. Just the urn itself was recovered and this is an example of a cordoned urn. It contained the cremated bones of a fully grown individual of slender build, probably a female[3].

The ringbarrow is another type of burial monument from the Bronze Age. It is a low earthwork, often difficult to see by the untrained eye. It consists of a circular area defined by shallow fosse with low external bank surrounding a central low burial mound. When archaeologically excavated the ringbarrow at Knockatreenane, Killumney, had the cremated bones of an adult male in a shallow pit at the centre. The burial was marked by a white quartz stone and the fact that there were no later burials inserted into the mound, a common practice, led the excavator to believe that "the man buried there was of particular importance in that community[4]."

This indicates a change in burial practice from communal burials in overground tombs as seen in the megaliths of the Neolithic period to single underground burials in the Bronze Age indicating a change in attitude towards death and the after world.



Computer generated reconstruction of Bronze Age settlement at Ballybrowney Lower, Rathcormac. Image courtesy of TII.

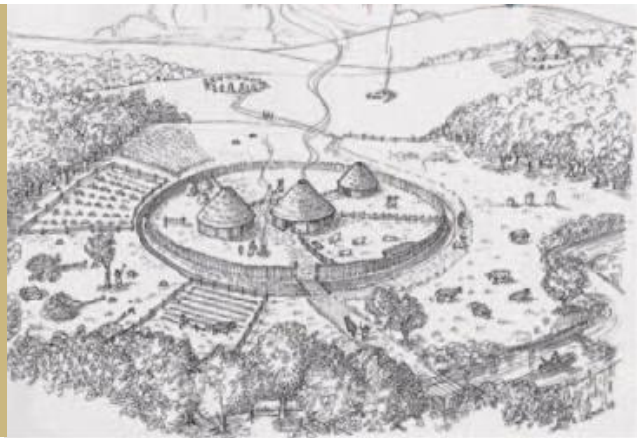
Great advances have been made in our understanding of Bronze Age Cork in recent years through discoveries made by archaeological excavations in advance of pipelines and road schemes and other large-scale developments. In most of these schemes it is the Bronze Age that is the most prolific in terms of discoveries, reinforcing the idea that this was an era of increased population with agriculture and craft production in boom times. This is also reflected in the numerous archaeological monuments, like fulacht fiadh, stone circles and stone rows, that survive from the Bronze Age.

The excavated evidence shows that around 1,500 B.C. Cork was well settled by people living in permanent settlements. These consisted of a number of clustered round houses with thatched roofs that had multiple family groups living together bonded by a form of kinship.

A good example of this type of settlement was found at Ballybrowney Lower, Rathcormac. A reconstruction shows a grouping of round houses adjacent to two enclosures, one of the enclosures with a large thatched house inside it - the other probably a pen for animals[5]. All this is recreated from little more than stains in the ground left by the rotten posts that once comprised the superstructure of these houses and enclosures. Because these are places where people lived over considerable periods of time some of the things that they discarded or lost, like broken stone tools and animal bones, will survive and these often let archaeologists reconstruct the social and economic lifestyle of the people who lived in these settlements.

Bronze Age settlement at Ballybrowney Lower, Rathcormac when excavation complete- the width of the excavation is the width of the M8 intake. Image courtesy of TII.

Reconstruction of a busy Bronze age landscape with an enclosed settlement like Ballybrowney lower with other monuments around. The people ae busy - ploughing, chopping trees, herding and cooking. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.



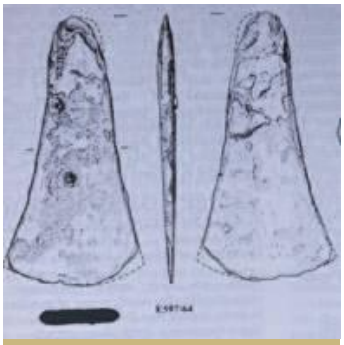
The same landscape today – little remains of the Bronze age landscape apart from the stone circle. What will survive – the stone axe, few pieces of pottery, post holes, a ditch all buried under the ground to be discovered though an archaeological excavation. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

Toormore Axe and copper lumps. Image courtesy of Prof. William O Brien.

ARTEFACT 17

Name: Bronze Axe
Location: Toormore, Mizen Peninsula
Material: Bronze
Date: 1,700 B.C.
Period: Bronze Age
Collection: National Museum of Ireland

The townland of Toormore is on the north side of Toormore Bay between Schull and Goleen. The wedge tomb here was excavated by Prof. William O'Brien of U.C.C. in 1990 as part of a programme examining archaeological monuments on the Mizen Peninsula dating to the early Bronze Age, including the nearby Altar wedge tomb and the copper mines on Mount Gabriel. The tomb at Toormore was in a poor state of preservation and had been much damaged in the 1930s when a public road was built nearby. The damage was considerable and no human remains were found in the tomb. The most significant find was made in the entrance area. Here a bronze axe was carefully deposited on top of two lumps of pure copper - the excavator



Toormore Axe.

Toormore wedge tomb during the excavation.

considered this a small votive offering that "may have been at the centre of rituals performed to invoke metal-making magic[6]." Thus, much can be deduced from what may initially look like fairly insignificant metal objects.

Both the axe and the two pieces of copper were examined by electron-probe microanalysis after samples were extracted from them using a jeweller's piercing saw[7]. This showed that much effort had gone into the manufacture of the axe, it having been "cold worked, annealed and cold worked through several cycles.[8]" This is the repeated process of heating the metal and then letting it cool slowly to improve its structure, before hammering it again towards its final shape.

Examination of the cutting edge of the axe showed that it was well used and therefore an important part of somebody's equipment. The chemical make-up of the copper showed that all three artefacts come from the same source and this was the mine at Ross Island in Killarney. This suggests the possibility that the two lumps of copper were traded into West Cork from the Killarney area.

The relationship between metals and the supernatural is one that repeats itself throughout the early Bronze Age, most obviously in the use of gold. This aura of "the magical" must also have attached itself to those who worked the metals, be they goldsmiths or those who mined, smelted and worked copper as well as those with the added knowledge of alloying copper with tin to produce bronze. Whilst the main "religion" of the people is tied in with the movement of celestial bodies, as exemplified by the alignment of stone circles like that at Drombeg, Glandore, there is also a reverence for metal and metalworkers that was something more than just admiration and appreciation. The offering at the entrance to the Toormore wedge tomb must be part of this veneration as embodied in the axe and the two lumps of pure copper so carefully placed in that location.

Thus we can detect from these three artefacts a great deal about the role copper and bronze played in the life of people in West Cork during the Bronze Age. As part of the ritual that surrounded the building and use of the wedge tomb was the careful placing of these three objects in the ground at a specific location close to the front of the tomb. The objects themselves do not appear to be of great value, the axe is old and well-used and the two lumps of copper are small and formless - things you might expect a working smith to possess. So their importance is in what they represent and that must be intrinsically tied into the material they are made from - copper and bronze - but also in some way with the person who owned and used these artefacts. Were they placed in the ground as a form of offering or were they placed there in memory of his craft or in devotion to that person? These three small objects hide a deep meaning we may never fully understand.

Mount Gabriel shovel on exhibition in Cork Public Museum. Image courtesy of Cork Public Museum.

ARTEFACT 18

Name: Miner's Shovel
Location: Mount Gabriel, Schull
Material: alder wood
Date: 1,700 B.C.
Period: Bronze Age
Collection: Cork Public Museum

It's hardly surprising but wooden artefacts dating to the Bronze Age are few and far between. Organic materials, like wood, decay rapidly in normal conditions but this is not the case if they are immersed in water. Water prevents decay by preventing the micro and macro organisms that attack wood from doing so. If a dug-out canoe made from a tree trunk sank in a lake four thousand years ago it will be as good as new if recovered from the water. However, once exposed to air its decay begins immediately and once fully dried out has a just a limited time before being reduced to dust.

When Prof. William O'Brien of U.C.C. archaeologically excavated the Bronze Age copper mines on the eastern shoulder of Mount Gabriel in the 1980s he found some of these were flooded and had been so since abandonment in the Bronze Age. This was fortunate in terms of organic survival and sure enough original wooden mining equipment was discovered. This included twisted withies of hazel and willow used to affix stone hammers to a handle. These hammers were just rounded stones collected from nearby beaches and were used to pound the ore-rich rock into small fragments. Also found were oak planks that formed steps for climbing down into and up from the mine as well as splints of resinous pine used as torches to enable work deep into the mine. The most outstanding wooden implement found was a shovel made of alder wood. Carved from a single piece of wood the shovel had a rounded handle and then widened out to the hollowed-out working end, though the tip of this was broken away. These artefacts give a glimpse of how the mines were worked and the lives of the people who worked there.

Drawing of front, back and cross section of Mount Gabriel shovel.

The Mount Gabriel mines were not particularly deep, their depth limited by the technique used in the mining excavation. Once a source of mineralised copper was identified from its characteristic blue-green colour on the rock when leached, a fire of wooden logs was set against the rock face. The heat from the fire eventually made the rock face brittle. This was then attacked with stone hammers to dislodge as much of the rock as possible. It has been estimated that from one fire setting the rock face could be broken back by about 5 centimetres. These fragments of mineralised rock were then pounded into smaller pieces, again using stone hammers. These hammers were just handy sized water-rolled stones collected from the local beaches and were hafted to a wooden handle with hazel and willow withies for use. The small fragments were then ready for the smelting furnace to extract the copper. This was then combined with tin to produce the alloy bronze. Where the Mount Gabriel ore was smelted is not known but it was not in the immediate area of the mines themselves.

Radiocarbon dates place the period when these mines were worked between 1,700 and 1,400 B.C. Mount Gabriel is just one location on the West Cork peninsulas where mining for copper ore took place in the Bronze Age, there are other similar mining locations on the Mizen and Sheep's Head peninsulas. One of these mines is close to the wedge tomb at Toormore, further underlining the connection between this type of tomb and the copper/bronze industry in this area.

The Mount Gabriel shovel, this unique survival of a prehistoric industry in Cork, is on display in Cork Public Museum. This is solid evidence of a Bronze Age industry that once boomed in West Cork. But who controlled this activity? Were the miners and the smelters and the smiths their own bosses or subservient to a king or warlord? Great wealth was being created here through manufacturing and trade but how did the system operate? And how do religion, cult and magic play a part as it certainly did? And what, if any, was the relationship between the people who feasted and worshiped at Drombeg Stone Circle on the mid-winter solstice sunset, to the miners and their people further to the west?

Stone hammer or maul used in the mines. Courtsey of the Discovery Programme.

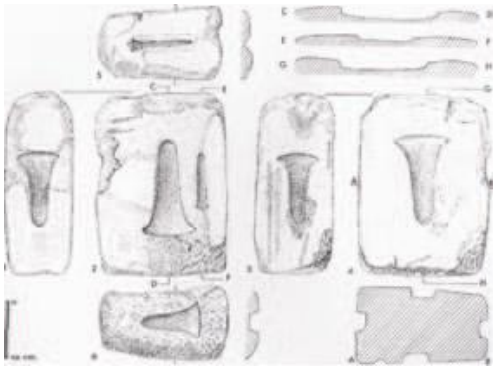
ARTEFACT 19

Name: Stone mould for casting bronze axes
Location: Doonour, Sheep's Head
Material: Sandstone grit
Date: 2,000 B.C.
Period: Bronze Age
Collection: National Museum of Ireland

In 1966 a farmer clearing stones from a field in Doonour townland, on the north side of the Sheep's Heap Peninsula, made an interesting discovery. This was a shaped block of fine-grained sandstone grit (30 x 22.5 x 14 centimetres) with shaped depressions, called matrixes, cut on each of its six sides. Into these cut matrixes molten bronze (or just copper) was poured into the depression to make specific implements. According to O'Kelly, in his study of the artefact, because the faces of the block are slightly uneven, it must have been set in a bed of sand so that the matrix was level when the molten metal was poured into it[9]. Five of the sides have a single matrix but the sixth has a pair; five of the moulds are for axe heads and the other two for chisels (though O'Brien thinks one of these is for a dagger[10]). In any case the mould indicated a thriving industry in copper/bronze axe production in an area that is producing copper from local mines.

Doonour Stone Mould. © National Museum of Ireland.

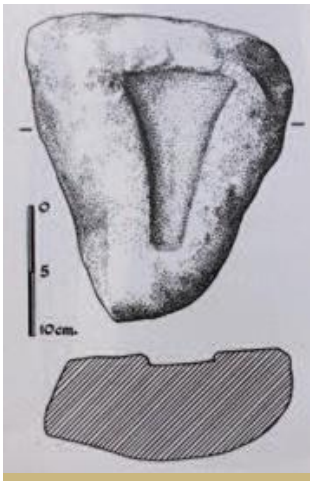
Pouring molten bronze into an open axe mould.



The Doonour Stone Mould, showing the six surfaces with the outline matrixes for the seven implements thus produced by the mould.

According to O'Kelly the depth of the metal in the mould was about 8 millimetres judging by staining caused by hot metal on the side of the matrixes. This process produced no more that a rough-cut axe shape that then required hammering and grinding to produce the finished artefact.

Though not as elaborate as the Doonour mould, there are two further Bronze Age axe-moulds from County Cork. These were found at Lyre, near Nad, and at Kilcronat, near Ballynoe. The Lyre mould has an axe matrix on either side but there is just one matrix on the Kilcronat mould. These moulds suggest relatively small-scale production, perhaps just being used whenever an axe was needed or when the raw-material was available. Whereas the Doonour mould suggests something on a larger scale, more akin to a small industrial set-up producing multiple axes for a variety of customers.



Kilcronat axe mould.

Lyre axe mould. Image courtesy of Cork Public Museum.

ARTEFACT 20

Name: Food vessels
Location: Castle Hyde, Fermoy
Material: Pottery
Date: 1,800 B.C.
Period: Bronze Age
Collection: National Museum of Ireland

Food Vessels from Castle Hyde cist burial discovered in 2003. Image courtesy of Prof. William O Brien.

Writing in the *Journal of the Cork and Historical and Archaeological Society* in 1905 the noted antiquarian Robert Day reported a recent discovery in the demesne of Castle Hyde, Fermoy, as follows: "while some farm labourers were engaged in ploughing the ploughshare struck a large flagstone which they were about to remove by blasting but fortunately succeeded in turning over with crowbars, and by so doing disclosed to view a most interesting pagan tomb, consisting of a cinerary urn of baked, hand-made clay, half filled with incinerated human bones and ashes[11]." The rectangular cist measured 90 by 80 centimetres and its location was described as "adjoining the mail coach road".

The pottery vessel, which is now termed a *food vessel vase*, was donated by the landowner William Wrixen-Becher to the National Museum of Ireland. A very similar discovery was made in the same demesne in 2003 during renovation works at nearby Castle Hyde House; the cist burial was subsequently excavated by Cork archaeologist Mags McCarthy[12]. In this case the cist was divided into two compartments but covered by a single large slab of rock. Two food vessel vases were found in one compartment and just a broken pygmy cup in the other, but no human remains. Pygmy cups are miniature version of *food vessels* whose exact purpose in not known.

Food vessel is a term used to describe two distinct styles of pottery found in single grave

burials in the early Bronze Age in Ireland and Britain. The two distinct styles are the *food vessel vase* and the *food vessel bowl*. As their name applies the food vessel vase has a more angular profile and is generally taller than the food vessel bowl with its rounder profile. Both types of pot are hand-made, most between 10 and 15 centimetres in height, and well decorated with a repertoire of geometric designs including herringbones, filled triangles, zig-zags, chevrons, or just zones of vertical or oblique lines. The patterns are very similar to those found on the gold-work and bronze artefacts of the early Bronze Age.

Food vessel vase discovered in Castle Hyde in 1905.

The placing of a pottery vessel in a grave beside a body has long been thought to represent a "last meal" for the dead on their journey into the afterlife. But the burial rite and what it represents must be different when the body is cremated and the remains placed inside the vessel, as was the case with the burial found in Castle Hyde in 1905. This suggests a more complex system of beliefs related to these vessels than simply as containers for a last meal on the journey to the next world. There is clearly a great deal of difference between placing a body intact into the ground to burning it on a pyre and then burying the cremated remains. We can see something of that in Ireland today with the gradual adoption of cremation by a society that traditionally buried its dead.

ARTEFACT 21

Name: Encrusted Urn
Location: Coolnahane, Kanturk
Material: Pottery
Date: 1,500 B.C.
Period: Bronze Age
Collection: Cork Public Museum

The Coolnahane Encrusted Urn. Image courtesy of Cork Public Museum.

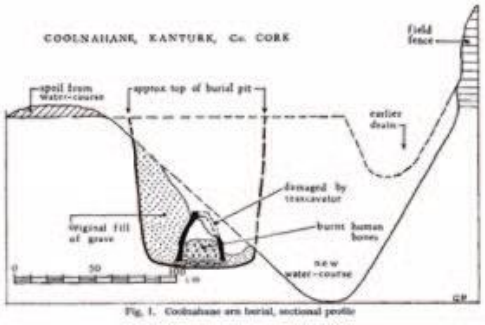
Most Bronze Age burials are accidental discoveries, often found during agricultural work where there is no surface indication of a burial site. An example is the burial at Coolnahane, near Kanturk. In 1975, as part of a land-improvement scheme, a broad V-sectioned drainage ditch was being cut by a drainage contractor using a mechanical excavator when he noticed something unusual - "a small hole appearing on the sloping field-side of the water-course cutting". Though the bucket of the machine had sliced out part of an urn the damage was slight, and the find was left undisturbed until inspected shortly afterwards by Prof. O'Kelly, U.C.C. who recorded and later published this important Bronze Age burial.

The burial had been placed in a simple pit that had near vertical sides, was 0.95 meters in depth and had a surface circumference of 0.85 meters. The base was roughly paved and onto it was placed the urn, face down, covering the cremated bone. The remains were those of a single adult but too fragmentary to say any more. One item with the bones was the tip of a bone pin which had been burnt; it probably secured some form of shroud around the body when it was cremated. The bones and the pin survive because they were burnt, otherwise they might have long ago dissolved over the thousands of years they were in the ground.

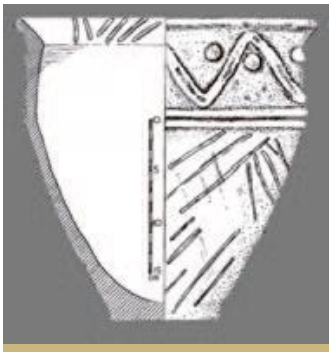
Man stands in base of excavated ditch; urn is on left beside the ruling stick.

The urn itself typically has a wide mouth (30 centimetres) by comparison to its narrow base (8 centimetres) and is 30 centimetres in height; this is not a functional shape so the pot was made specifically for a burial. As the name of this type of urn implies the main decorative feature are applied strips - encrustations. The applied strips form a zig-zag pattern with circular pellets applied between the angles. This is a pattern common to many such urns. The sloping surface is decorated by scored lines in rough diagonal groupings.

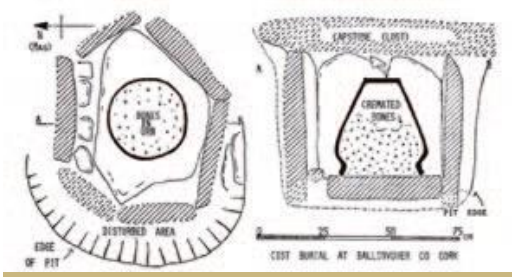
Bone pin from Coolnahane burial.



O'Kelly's section drawing of the urn burial.



Drawing of the Coolnahane Encrusted Urn.



Plan and section of the Ballinvoher vase urn burial.

Ballinvoher vase urn. Image courtesy of Cork Public Museum.

These cinerary urns divide into three broad groupings: *encrusted urns, cordoned urns* and *collared urns*. Encrusted urns and cordoned urns are indigenous traditions to Ireland but with examples also occurring in northern Britain and particularly south-west Scotland. Collared urns are a British tradition with a small scattering of examples along the eastern coastal area of Ireland. For more on this type of burial see the previous volume in this series *Archaeological Heritage of County Cork*.

Archaeologists have long argued as to the significance of these varying distributions that suggest some cultural difference between Ireland and northern Britain on the one hand and the rest of Britain on the other. Of the eight surviving urns from burials in County Cork six are *encrusted urns* and two *cordoned urns*, but no *collared urns*.

There is a hybrid type known as a *vase urn*, and one of these was found in a cist burial at Ballinvoher, Castletownroche in 1974[13]. The *vase urn* contained the cremated bones of an adult and an infant. Nearby a pit, covered by a slab, contained a small amount of cremated bones and a perforated boars tusk that probably tied the bag in which the bones were originally contained.

Versions of this pottery were also found on domestic Bronze Age sites excavated on various T.I.I. road schemes. In general, this pottery is cruder than that made for burials but more functional in shape and often burnished (the surface rubbed smooth) - "an unusual feature that may have been intended to further waterproof pots for domestic use[14]."

The single-burial tradition starts out with a body placed in a crouched position in a stone-lined box buried in a pit in the ground and the body accompanied by one or two pots. These presumably were to provide the individual with sustenance for the journey into the underworld - hence the term *food vessel*. By the end of this tradition the body is cremated and the burnt bones, probably wrapped in a cloth bundle, placed in the bottom of a pit, without any stone lining, and covered by a distinct type of pot, either an *encrusted urn* or a *cordoned urn*. This change in burial practice must represent a change in regard to how people saw death and the afterlife through the Bronze Age; something about their understanding of the journey to the underworld had changed. This probably represents a change in the nature of society itself and the status of those being buried in these different ways.

Mitchelstown Face Cup. Image courtesy of T.I.I.

ARTEFACT 22

Name: Mitchelstown Face Cup
Location: Mitchelstown
Material: Pottery
Date: 1,800 B.C.
Period: Bronze Age
Collection: National Museum of Ireland

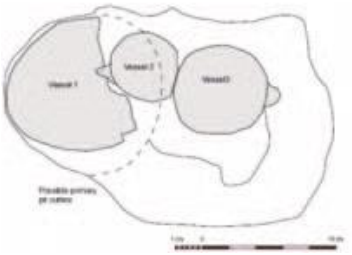
Of all the discoveries made on the road schemes in Cork it was a small pit on the Mitchelstown Relief Road that produced the most exotic find of all. It was a miracle in itself that the pit had survived as much as it did as the area was often ploughed over the centuries. The pit contained four items made of pottery: three vessels and a spoon; all four were fragmentary but could be reconstructed to some extent to their original form. The pit was close to the north bank of the Gradoge River within what was once the demesne of Mitchelstown Castle; the location is close to the *ice house* that is now a heritage feature on the relief road.

The pit was dug in two episodes with only a short time between them. The first pit had a flat stone at its base on which an encrusted urn (vessel 1) had been placed in an upright position. This is the usual form of a middle Bronze Age pit burial (see Artefact 21). But there was no burial with this urn (it should be covering a bundle of cremated human bone) - it is possible that the bones have just eroded away, though cremated bone is fairly resilient to decay. Shortly after the urn was placed in its pit, the pit was extended and two further pottery vessels, both

bowls, placed beside the urn. One of these has a human face with eyes, nose and ears prominent (vessel 2). The second bowl is plain and is tub-like in form (vessel 3). With these was a ceramic spoon. The close resemblance in form and texture of the face cup and the tub-like vessel and the spoon suggests all three were made together and placed in the pit as a unit; the original location of the spoon is not known as it was found broken into scattered fragments within the pit. Nothing like these three items has been found in either Ireland of Britain or anywhere else in north-western Europe.

Interpreting what this pit means is open to speculation and its uniqueness further deepens the mystery. It has been suggested that "the absence of a burial with the urn raises the possibility that this is a cenotaph deposit, where the face-mask cup symbolically replaced an actual internment. The ceramic spoon and tub-shaped vessel may have been used for libations or offerings as part of this ritual. Alternatively, this ceramic deposit may be viewed as a votive offering, placed in request, thanksgiving or expiation to a supernatural power[15]."

Pit that contained face cup being archaeologically excavated. Image courtesy of T.I.I.



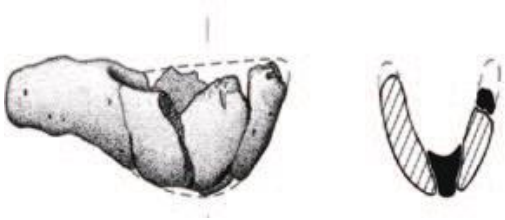
Plan showing location of three vessels in pit

The absence of any cremated human bone, in what appears to be a deliberate ceremonial deposit suggestive of a burial act, is one of the puzzling aspects of this feature. The uniqueness of the human-face cup, the bowl and the spoon suggest ritual both in their use and in their placement in the ground. There is something very deliberate and very specific going on here but not part of a wider practice as nothing like this has been found anywhere else in Cork or anywhere else. This is a unique find and one of the most spectacular artefacts found on any of the T.I.I. motorway excavations. It is described by the expert (Grogan 2017, 84) who examined it, as the 'most startling discovery' from a national road project over the past 15 years and as 'a unique artefact deposit at both an Irish and a European level'[16].

Face cup with prominent nose, eye and ear. Image courtesy of T.I.I.

Plain vessel from pit. Image courtesy of TII.

Pottery spoon from pit.



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Chapter 7
Hoards and Weapons
The Middle and Late Bronze Age (1,500 B.C. – 800 B.C.)

The later Bronze Age in Cork, from 1,500 B.C. up to 800 B.C., is a period of boom then bust then boom again. This is reflected in the artefacts of the period which go from plentiful to scarce and then plentiful again. The downturn in the middle of this period is roughly 1,200-950 B.C. and seems to be caused by deteriorating climatic conditions particularly after the massive Hekla 3 volcanic eruption in Iceland in 1159 B.C. If we judge by the amount of gold jewellery made then the good times certainly returned 950-800 B.C. In terms of monuments, the great ritual sites, the stone circles and stone rows with their astronomical alignments, communal ceremonies and feasting, continue to be built and used after 1,500 B.C. but by around 1,200 B.C. their time is past. In terms of craft production we continue to see innovation in the production of bronze tools and weapons, with the latter becoming more sophisticated and numerous after 1,200 B.C. More weapons, especially swords, indicates a change in social conditions to more warlike times, a point further emphasised by the building of hillforts.

One way of trying to understand what changes are happening through the later Bronze Age is to look at the environment of the time. This can be done by the study of ancient pollen grains and plant remains. Studies of the prehistoric pollen record for the county have been carried out by Ann Lynch in the 1970s[1], and in the 1980s as part of Professor O'Brien's work on the Mizen Peninsula[2]. As anyone with hay fever knows, plants disperse air-borne pollen each year. As bogs grow the pollen that falls on the surface of the bog each year is preserved in the build-up of peat over time. Using microscopic examination of peat from different levels in the bog and noting the different types and frequency of pollen each level contains, scientists can calculate the changing pattern of plant species growing in the environment of the bog over time. Thus, for example, as farming increases the tree pollen will decrease and the pollen of plants associated with agricultural cultivation increase; and if farming activity decreases the opposite pattern is evident. Thus, past environments can be revealed and show man's impact on those environments and how that has changed from age to age. The pollen counts show a great intensification of farming activity and a drastic reduction of woodland cover after 1,500 B.C. Then, according to Ann Lynch the period 1050 -850 B.C. sees a lull in this activity with a regeneration of scrub on marginal land. After around 700 B.C. the pollen record shows that "the basis of subsistence had shifted to pastoral activities that continued until c. 500 B.C. at which time a marked recession in activity occurs[3]."

The evidence for farming practices is more directly found from the macroscopic plant remains recovered from archaeological excavations[4]. For example, from cereal seed grains recovered from excavations on the road schemes Monk suggests that barley was the main crop grown in the Middle/Late Bronze Age though some wheat, rye and possibly oats were also grown[5]. Many of these seeds are very small in size and often need a process like the wet sieving of excavated soil for their recovery during the excavation process.

The type of daggers produced in bivalve moulds like that from Inchnagree.

The increased technical sophistication in metalworking through the Bronze Age is exemplified by the development of bivalve moulds, and then later the lost-wax technique of casting. Bivalve moulds consist of two valves each with a matrix (depression cut into face of the stone mould in the shape to be cast) representing a negative of half the artefact to be moulded. These two valves are tied together with an opening at the top to allow molten bronze to be poured into the mould. This is a tricky process as recent experiments[6] have shown but once mastered can produce an array of tools and weapons, including palstave axes, spearheads and swords. A bivalve mould from Inchnagree, Doneraile, was used to produce four types of dagger, indicating the mass production of weaponry and the demand for such items. This mould also indicates that highly skilled bronze smiths were active in North Cork during the Bronze Age.

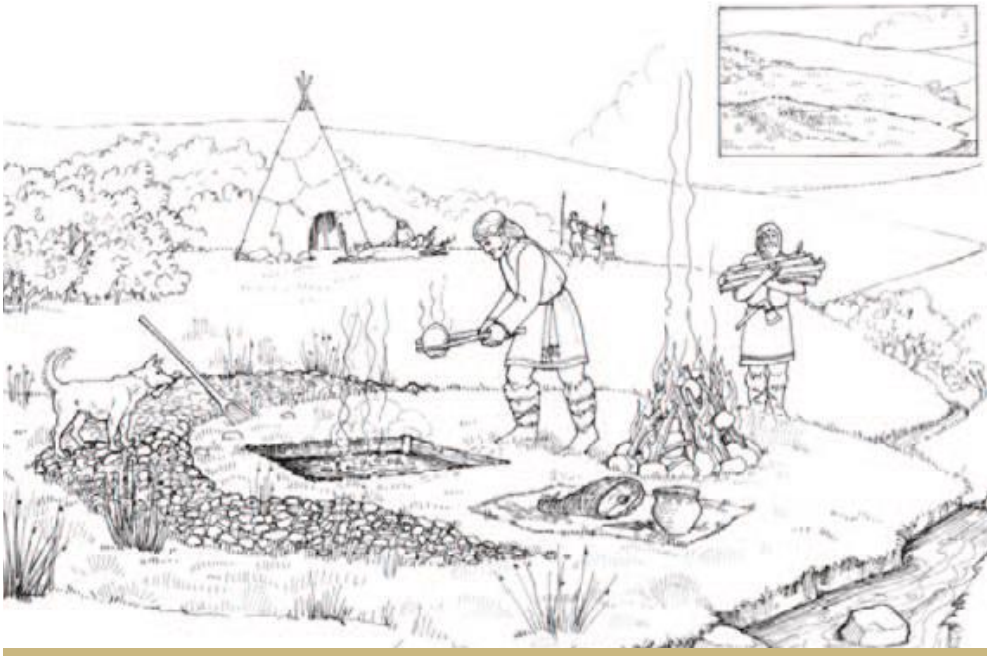
Sheet bronze work is also developed and with riveting and soldering was used to produce artefacts like cauldrons and musical trumpets (often referred to as *horns*). Though only a fragment of a single cauldron survives for Cork, the county can boast nine bronze trumpets though at least another fifteen were melted down after being found (most in bogs) in the 18th and 19th centuries. The musical tradition in Cork goes back a long way!

The increased sophistication of craftsmanship is also evident in the development of amber working. Amber is a resin produced by coniferous trees that becomes fossilized over many millions of years in the ground. One of the main sources of amber in Europe is along the shores of the Baltic Sea, particularly in Jutland. During the Bronze Age an extensive trade in Baltic amber flourished across Europe and by the later Bronze Age enough was being traded into Ireland for a native amber craft industry to develop. The main product of this craft was beads for necklaces; some Bronze Age amber necklaces from Ireland contain hundreds of beads. The largest in Cork was found in the 1920s in a bog at Murrahin North, Ballydehob, and contained around eighty beads, of which, some seventy survive.

More than any other period in Irish prehistory the later Bronze Age is the age of hoards. A hoard is a group of artefacts that for whatever reason was deposited in the ground or in water and never recovered but found, usually by accident, in recent times. Many hoards are described as *votive offerings*, that is, were deliberately deposited as an offering to the gods. The fact that so many are found in bogs, rivers and lakes suggests that the deity in question was aquatic in some form. The votive nature of these hoards is further emphasised by the valuable objects of gold and/or bronze they contain and the high level of craftsmanship these often display. The hoard from Mountrivers may be so described with its bronze, gold and amber content. But hoards may also have been buried to safeguard the contents in time of danger with the intention of their retrieval once the danger past. A clue to this type of hoard is they often contain unfinished objects or ingots, like those a smith might carry for his work. An example of this may be the Cappeen gold hoard with its finished and unfinished gold objects. County Cork does not have as many hoards as other counties and this may be because it does not have extensive tracts of bogland - a likely place to find a hoard- nor have Cork's rivers been drained to the extent that the Shannon or the Bann have - both these rivers have produced hoards when dredged. Nonetheless, sufficient number of artefacts have been found to show that Cork had a thriving gold and bronze industry in the Bronze Age.

One monument that is encountered throughout the Bronze Age is the fulacht fiadh, the most numerous prehistoric monument in Cork and indeed throughout the country as a whole. They are discovered on nearly all road schemes, pipelines and large-scale developments when these are monitored by archaeologists. Whatever we know about Bronze Age people in Cork one thing is for sure, they boiled a lot of water. We know this because of the fulacht fiadh, which is the most numerous archaeological monument in the county - to-date over three thousand examples have been identified. If preservation conditions allow (i.e. the site is waterlogged) the plank lined troughs in which the water is boiled can survive, often with timbers well-enough preserved to see the original axe scars. An example of this is the fulacht fiadh at Scartbarry, Watergrashill, archaeologically excavated in advance of the M8 roadwork.

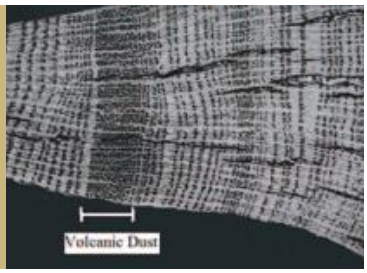
The general picture that emerges from these studies and excavations is a well-established mixed subsistence economy between 1,500 and 1,200 B.C. After the turn of the millennium there is a change in land-use patterns with pastoralism becoming more dominant. There is also notable climate deterioration around this time reflected in the spread of bogland and increased soil acidification. A contributing factor to this was probably the volcanic eruption in Iceland of



Reconstruction of a cooking event at a fulacht fiadh. Drawing by Rhoda Cronin, courtesy of T.I.I.

Bronze Age farming scene: enclosed settlement with pastoral and arable farming. Image courtesy of the Discovery programme.

Excavated soil being wet sieved to recover very small items like seed grains. Image courtesy of TII.



Cross-section of tree rings showing band of narrow rings (1,159 – 1,141 B.C.) corresponding to the aftermath of the Hekla 3 volcanic eruption, indicating period of very poor weather conditions.

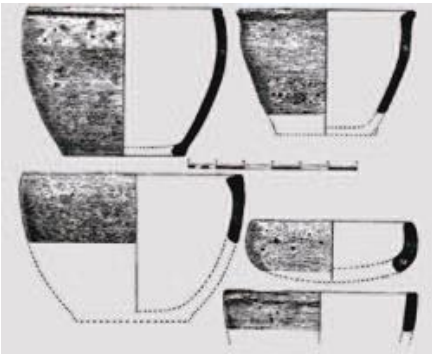
Hekla 3 in 1159 B.C., which produced massive dust clouds that had a disastrous affect on weather conditions over Europe. This is reflected in the narrowness of tree rings in oak trees in Ireland between 1159 and 1141 B.C.; narrow tree rings are produced by adverse weather conditions. This had to be a terrifying experience for people living in Cork at the time who had no way of knowing why the sun had deserted them causing devastating crop failure in their fields. It is not stretching the archaeological evidence far to suggest this was a time of famine and violent social upheaval in Cork.

A recent study by Sligo I.T. showed that the bones of farm animals from the later Bronze Age showed increased levels of Nitrogen 15[7]. This is an indicator that they are grazing on plants grown on nutrient-poor soil - a sign of over farming. This may be also be a reason for the downturn in agricultural activity after around 1,200 B.C.

By around 900 B.C. there is another revival in farming activity that lasts for a couple of centuries but there is a fall in agricultural activity again by 600 A.D., that lasts through most of the Iron Age.

The late Bronze Age is often characterised as the age of *warrior elites*. In terms of *warriors* we have a proliferation of weapons, especially swords and spears. In terms of *elites* the presence of high-status gold and bronze artefacts represent a concentration of wealth in special individuals. We are now leaving behind the world of communal sun worship at stone circles and stone rows for a world that seems to be dominated by power struggles and communal violence.

Perhaps no monument represents the changing situation around 1,200 B.C. more than the hillfort in Clashanimud, Upton. Built on a prominent ridge with extensive views over the surrounding countryside, a double ring of ramparts surrounds the hilltop, enclosing an area 350 meters x 250 meters. Nothing on this scale had been built in the county before so it "indicates a considerable command of labour, which would have been beyond the efforts of a small community of farmers. There can be little doubt that this hillfort was an important symbol of stability, political dominance and military might in the Cork region[8]." It was built sometime around 1,150 B.C., and then burnt to the ground around 900 B.C. According to the excavator this represents the deliberate slighting of a regional tribal centre in a conflict that "must be viewed on a wider geographical scale, involving disputes with other powerful groups in the Munster region[9]"; a troubled time indeed. One very curious fact that the archaeological excavation of Clashanimud revealed is that the hillfort was never inhabited, or at least not by



Coarse undecorated Late Bronze Age pots from O'Kelly's excavation at Carrigillihy, Glandore.

any number of people over an appreciable period of time. Was it built as a place of refuge to be used only in times of trouble or was it more a symbol of power and status rather than a place for communal living? Cork has two more impressive hillforts, on Corrin Hill overlooking Fermoy and on Caherdrinny hill between Fermoy and Mitchelstown. Neither of these has been archaeologically excavated but their commanding positions overlooking the eastern end of the Blackwater Valley indicates they were once places of some importance.

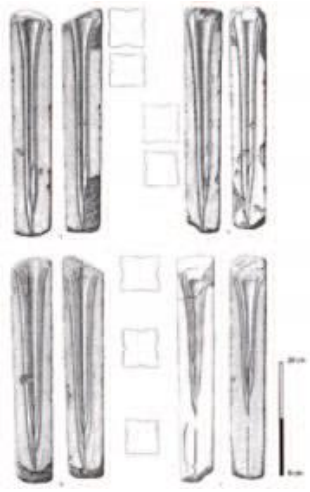
One craft that fades and eventually disappears towards the tail end of the Bronze Age is pottery. The typical vessel of the late Bronze Age is a plain, coarse, undecorated flat-bottomed pot as exemplified by the pottery found by O'Kelly in his excavation at Carrigillihy, Glandore[10]. Pottery as a general utensil must have been replaced by something else - perhaps woven baskets, hollowed out wood or stave-built buckets - but these are made of perishable organic materials that do not survive in the ground unless waterlogged. Once people stop using pottery they can become *invisible* in the archaeological record as pottery survives so well in the ground compared to most other useable materials. By around 600 B.C. pottery disappears entirely from the archaeological record and for about a thousand years the country is without pottery of any kind - bad news for archaeologists trying to find sites where people lived during the Iron Age.

We have already seen how important pottery was in the burial traditions of the Bronze Age. As we approach 1,000 B.C. that tradition degenerates to the extent that the pottery accompanying a burial is no longer the finely made and decorated *Food Vessel* or an *Encrusted* or *Collared Urn*, but a crudely made undecorated bucket-like pot. The cremation burial from Killydonoghue, Glanmire, uses such a pot and has been described as a "token cremation[11]" symptomatic of the reduced ceremony involved in such burials towards the end of the Bronze Age.

The following artefacts represent the skilled artisans that worked in Cork during the Middle and Late Bronze Age. Much of what survives in terms of gold and bronze objects is the result of chance finds, most made in the 19th century, and whose survival often depended on their being purchased by antiquarian collectors at the time. In more recent times the results of archaeological excavations, be they academic research projects or part of infrastructural developments, have filled out the picture, as has archaeological survey with the identification of more and more monuments throughout the county.

ARTEFACT 23

Name: Bivalve mould
Location: Inchnagree, Doneraile
Material: Stone
Date: 1,500 B.C.
Period: Middle Bronze Age
Size: Length 40 centimetres; Width 8 centimetres
Collection: National Museum of Ireland



Inchnagree bivalve moulds.

Bivalve moulds consist of two blocks of stone each with a matrix (depression cut into face of the stone) representing a negative of half the artefact to be moulded. These two valves are firmly tied together and the molten bronze, held in a crucible, is poured in via a hole at the top where the two stones meet. This is a tricky process as recent experiments[12] have shown but once mastered can produce an array of tools and weapons, including palstave axes, spearheads and swords. The bivalve mould from Inchnagree, Doneraile, was used to produce four types of dagger. To do this it has four negatives on two stones, one on each stone matching one on the other. An important aspect of this technology is that the bivalve mould is reusable and so mass production is possible once the raw material is available. Therefore, the bronze smith who used this mould could produce many weapons in a short space of time.

The Inchnagree mould. © National Museum of Ireland.

Judging by the number and variety of bivalve moulds that survive from the Bronze Age, Ireland had a thriving industry producing a great variety of bronze tools and weapons. There was clearly a demand for daggers like those produced by the Inchnagree mould, which indicates the growth of a *warrior* class in society who must have carried weapons like this as a mark of their status in the same way that cowboys wore holstered six-shooters.

No dagger produced by the Inchnagree mould has been identified but the mould itself tells us that such daggers were being made in North Cork during the Bronze Age and that there was a demand for such items. With a fine bone handle attached by rivets to the blade and the blade of freshly cast bronze the finished article was an impressive implement. These were perhaps as much for display and prestige as necessary weapons of war, though they also served that need if necessary.

ARTEFACT 24

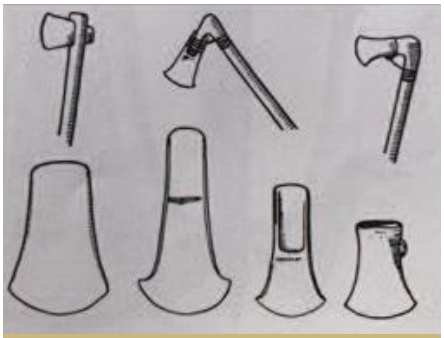
Name: Socketed axehead
Location: Vicinity of Glanworth
Material: Bronze
Date: 1,000 B.C.
Period: Late Bronze Age
Size: Length: 22 centimetres; Width 12 centimetres
Collection: Cork Public Museum

Socketed bronze axe head from the Glanworth area. Image courtesy of Cork Public Museum.

The most prolific artefact produced by bronze smiths in Ireland during the Bronze Age was the socketed axe with over 2,000 examples known from the country though just twenty of these were found in County Cork. Though only a few broken fragments survive, none of them from Munster, the stone and clay moulds from which these axes were made show that they were cast in bi-valve moulds. Though there is some variation in size and decoration of the axes they are all basically very similar - they have a hollow butt to take the end of a wooden handle that was inserted into the axe; a gently curved cutting edge extended out at either end beyond the thickness of the butt, and just below the open end is a semi-circular loop.

But why were so many of these axes manufactured and what were they used for? According to Professor George Eogan "the socketed axe was a widely used and versatile tool, apparently within a tradition of wood-working ... it is also very likely that there was a need for more specialised craftsmanship in wood, hence the variation in size[13]."

Because the socketed axe is hollow with an open end the haft can be fully inserted into the axe head, thus making slippage of the head from the handle during use less likely. The loop on the side of the axe also allows it to be fastened onto the haft in a secure manner. Thus attached the axe can be used for either more vigorous or more delicate work than its predecessors. Another advantage is that because it is hollow, less metal is required in its manufacture and makes a lighter and more portable object.



Evolution of bronze axes from open-cast axe on left, bivalve palstave axes in centre, and socketed axe on right.

Evidence for Bronze Age woodwork comes mostly from finds made in bogs or at waterlogged sites like fulacht fiadh. In Cork we have wooden troughs of fulacht fiadh made from planks of oak that clearly show the chop-marks made by axes (see Artefact 25).

Unfortunately none of the finer woodwork that these woodworkers made, like furniture, has survived but the range of tools does suggest that these were accomplished carpenters so the interior of a Bronze Age house was probably a well-appointed place.

But there seems to be more to these axes than just useful woodworking tools. Eogan notes that many have decoration "which is quite extensive on some ... this would seem unnecessary if they were simple work tools[14]."

As we see with the Mountrivers hoard (Artefact 26), socketed bronze axes were prized enough to be deposited in a buried hoard with exotic objects like gold and amber jewellery. It therefore seems likely that a well-made socketed bronze axe was a prized possession and may have been seen as part of an important person's *regalia* and displayed as such. It is also possible that woodworkers were important and significant members of Bronze Age society.

Socketed axes from unknown location in County Cork except axe on left which was found in Paddock, Kinneigh.

Socketed Axes - top row from left: Baltimore, Carrigaline West; Bottom row, from left: Carrigaline West, Currymount, Kilbarry. © National Museum of Ireland.

Socketed axe from Mountrivers hoard. © National Museum of Ireland.

The Cappeen Gold Hoard: neck torc in centre; twisted ring bracelet bottom left; penannular bracelet bottom right, coiled bar upper left; flat band upper right. © National Museum of Ireland

ARTEFACT 25

Name: Cappeen Gold Hoard
Location: Cappeen
Material: Gold
Date: 900 B.C.
Period: Late Bronze Age
Size: Diameter of bracelet: 6 centimetres; neck torc: 12 centimetres
Collection: National Museum of Ireland

In 1896 a local named Daniel Lynch made a remarkable discovery of five gold objects "between 2 stones ... at a fort in Cappeen[15]"; it is not known if this is the well-known ringfort of Cahervaglier in this townland, or some other ringfort in the vicinity. Lynch sold the gold objects to an official in the local Munster and Leinster bank for £11, their bullion value 4.5 ounces, who in turn sold them on to the well-known Cork collector Robert Day for £25. However, the law was quickly on the trail of the hoard which, according to the law of Treasure Trove, was the property of the State (as they still would be today). In the end, Day donated the gold objects to the Royal Irish Academy and they are now part of the collection of the National Museum of Ireland. If we take the "fort" to be a ringfort, like the magnificent enclosure of Cahervaglier in Cappeen, which dates to the Early Christian period, then the hoard cannot have been buried there during the Bronze Age as the fort didn't exist then.

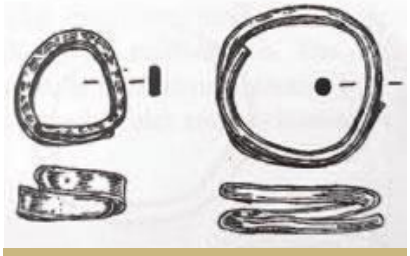
Mary Cahill has described the hoard as consisting of "a plain penannular bracelet with slightly expanded, solid terminals; a partially twisted ring of bracelet form with slightly expanded, solid

terminals; a bar-twisted ring; either a very small neck torc or armlet; a coiled bar with slightly expanded ends of bracelet form, which may be an unfinished bracelet; and a coiled, thick, flat band, possibly a piece of scrap[16]." The penannular bracelet is the closest to a finished piece in the hoard with the torc neck-ring (Eogan calls it an *armlet*[17]) finished except that the terminals are straight and plain instead of finished in some way.

The Cappeen hoard is the largest collection of pure gold objects from the Bronze Age in Cork. This shows that the production of gold ornaments was a well-developed craft industry and that these were prized objects and likely to be sought after as booty in troubled times. It can't have been very safe being a goldsmith travelling the countryside looking for a chieftain who could afford such luxuries and carrying the raw material around with you.

Not knowing the exact details of where the find was made and how exactly it was set into the ground is a major impediment in making sense of the Cappeen gold hoard. Hoards in this area go back to the copper axes of the early Bronze Age (see Artefact 11, Chapter 5) but this one is not from a bog, as so many of these hoards are, but on dry land - "at a fort". Most gold hoards from the Bronze Age consist of finished ornaments and are therefore likely to have been *votive offerings* - placed in the ground as a precious gift to the gods. But apart from the bracelet and possibly the neck torc, none of the Cappeen artefacts look finished. These factors, where the hoard was deposited and the nature of the artefacts themselves, does suggest it was hidden by a goldsmith who meant to retrieve the items when trouble passed - which it obviously didn't.

Neck torc (armlet) and bracelet from Cappeen hoard.



Ring (left) and coiled bar from Cappeen hoard.

ARTEFACT 26

Name: Mountrivers hoard
Location: Mountrivers
Material: Gold, bronze & amber
Date: 800 B.C.
Period: Late Bronze Age
Collection: National Museum of Ireland

A fantastic hoard of artefacts from Late Bronze Age Cork was found in Mountrivers, Rylane, in 1907 when "two men, named respectively Michael Sullivan and William Connell, were making a fence on Kate Connell's land at Mountrivers[18]." This description comes from a contemporary police report into the circumstances regarding the discovery and its compliance with the law of Treasure Trove. Robert Day, whom we met earlier (Artefact 25), had purchased two of the items from the hoard which he had then passed on to the Royal Irish Academy but the other

The Mountrivers Hoard. © National Museum of Ireland.

Drawing of items in the Mountrivers hoard.

four items were still unaccounted for. Eventually, through the intercession of the local parish priest, all the items in the hoard were purchased by the Academy, at a total cost of £33, and are now part of the collection of the National Museum of Ireland. Mary Cahill speculates that the find-spot might be one of the ringbarrows in Mountrivers; when doing fieldwork for his Master's thesis on the archaeology of East Muskerry barony in the 1930s, P.J. Hartnett was informed by the landowner that one of these had been dug-up sometime in the past by treasure hunters[19]. Ringbarrows are Bronze Age burial monuments that take the form of a circular earthwork, with a diameter of around 10 metres, in which a cremated burial is placed in the centre, sometimes accompanied by a *food vessel* or an *urn*. None of the excavated examples have produced anything like the Mountrivers hoard as grave goods so it would be very exceptional if these were indeed placed in a grave for that purpose. The particular ringbarrow shown to Hartnett as the one where a "treasure" had been found is no longer evident on the ground having been levelled out long ago.

The five artefacts in the hoard are two socketed bronze axes, two gold and one bronze *dress fasteners* (see Artefact 31) and eleven amber beads. It is very rare for a hoard to contain artefacts made in bronze, gold and amber and the Mountrivers hoard is very important in that respect. These items and the amber beads have been described as the "personal regalia of a prominent male[20]".

The amber bead necklace and the three dress fasteners are all items of personal adornment but the two socketed axes seem incongruous in this context. However, in the context of this hoard they must be regarded as items of high value and status and indicators of the status and wealth of the individual who owned and displayed them.

Dress fasteners are very similar to bracelets but instead of being circular they are more semi-circular so wouldn't fit easily on a wrist. Whereas the terminals on bracelets are expanded slightly, those on dress fasteners are more widely splayed and often hollowed-out in umbrella fashion. The reason for this design seems to be as a tie in the front of a cloak where the terminals fit into two buttonholes. But this is conjecture as no example has been found with clothing. The bronze example from Mountrivers is the only example of a dress fastener made of bronze; all other examples are gold.

The Mountrivers hoard is unique with its mixture of artefacts made in different materials and of different forms, both jewellery and tools. If it is the regalia of an important male, possibly a local king, then it would be a suitable collection of valued belongings to place in his grave. Ringbarrows are burial monuments and one was being levelled when the discovery was made so why not regard the Mountrivers hoard as *grave goods*? The problem with this idea is that nothing of this quality and diversity has ever been found in a ringbarrow burial in Ireland or in any other Bronze Age burial in Ireland. Again, it's an awful pity we don't know more about the exact details of how and where exactly this hoard was found.

For more on socketed axes see *Artefact 24*; for amber necklaces see *Artefact 29*, and for dress fasteners *Artefact 31*.

ARTEFACT 27

Name: Sword
Location: Somewhere in County Cork
Material: Bronze
Date: 800 B.C.
Period: Late Bronze Age
Size: Length: 55 centimetres; Width 5 centimetres
Collection: National Museum of Ireland

Late Bronze Age sword from County Cork. © National Museum of Ireland.

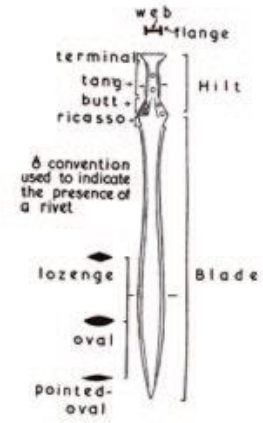
Through the earlier part of the Bronze Age the standard bronze weapons of a warrior were a spear, a dagger and a rapier. The rapier had a slim narrow blade and was a thrusting weapon; the one example from County Cork is now in the Ulster Museum[21]. But a big change in weaponry swept across Europe in the Later Bronze Age, reaching Ireland around 1,000 B.C., with the introduction of the slashing sword. At the dawn of Irish history, with the hero tales of the Ulster Cycle, the sword is the primary weapon of the hero, is a high-status gift and some even had personal names like *Caladbolg* the special sword of the Ulster king[22] (and of course *Excalibur* was King Arthur's sword). These are slashing swords, though by the time of the tales were made of iron - the special relationship of the hero with his sword probably goes back to the Later Bronze Age. The need for swords in Ireland during the Later Bronze Age is indicated by the numbers that survive from the period - over 600 examples[23]. Some eleven Bronze Age swords have been found in County Cork but most of these are known just as from somewhere in the county, like the sword shown above.

The blade of a typical Bronze Age sword is flat and wide, typically described as *leaf-shaped*, and importantly the hilt (handle) is now part of the sword itself. The hilt was covered with a softer material like wood or bone, riveted onto the metal, to form a solid handle comfortable to hold. This broader and firmer handle was necessary so that the warrior could grip it confidently when making a slashing motion which took more force than the thrust of a rapier.

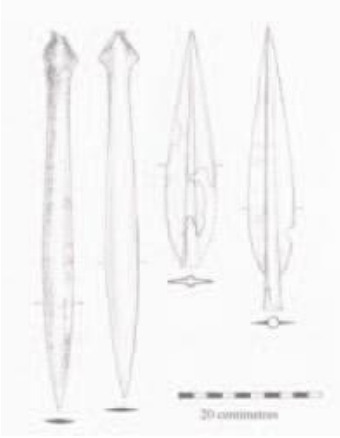
These are fighting weapons and many of the surviving examples show signs of repair; it seems that the hilt was inclined to break off - probably when too much force was used in a slashing blow.

The manufacture of a bronze sword involved a number of stages each requiring a great deal of skill. Firstly and very importantly was the quality of the bronze itself; if the metal was too soft the sword would bend but if too hard then it was brittle and shattered easily. The alloy mixture was vital and 10% tin to 90% copper was necessary for the best consistency. The metal was then cast in a bi-valve mould; the few fragments of moulds that survive are of baked clay. All the surviving fragments of these clay moulds suggest that once the sword was cast the mould was broken to extract the cast sword. Once cast the sword was trimmed, smoothed down and sharpened and then the surface was hammered to harden the metal. Finally two plates of bone or wood were riveted onto the hilt to make the handle.

In 1866 the Royal Irish Academy acquired a very interesting hoard of two bronze swords and two bronze spear heads, now in the collection of the National Museum of Ireland. According to Armstrong "these are registered together as found near Youghal, County Cork .... it is not expressly stated that they were discovered in association, of this there can be little doubt; all being acquired at the same time[24]." This is all that is known about the discovery of these four artefacts but nobody has doubted Armstrong's assertion they were found together and constitute a hoard. Though all four weapons are damaged and corroded there is no mistaking they are late Bronze Age in date. An exceptional number of Bronze Age weapons have been found in rivers, and one wonders if this hoard could have come from the River Blackwater which enters the sea at Youghal. Rivers like the Shannon and the Bann when dredged have produced a lot of Bronze Age weapons, particularly swords and spears. What these weapons are doing in rivers is a matter for speculation but it seems unlikely all were lost and much more likely they were deliberately cast into water as some form of *votive offering*, a tradition that is well established in Ireland by the Late Bronze Age.



Parts of a leaf-shaped Bronze Age sword.



Youghal hoard: two swords on left; two spear heads on right

ARTEFACT 28

Name: Spear heads
Location: County Cork
Material: Bronze
Date: 800 B.C.
Period: Late Bronze Age
Size: Lenghts (from left to right): 16 centimetres; 11 centimetres; 7 centimetres
Collection: Cork Public Museum

Drawing shows how wooden shaft is secured using loops on either side to the bronze head of the spear.

If the Bronze Age warrior carried a sword there seems little doubt that he also carried a spear. Bronze spears, of which 15 are known from County Cork, come in a great variety of shapes and sizes but show some evolution in form over time. They all have hollow sockets to take a wooden shaft. This is an advanced type of bi-valve moulding where the hollow socket is created by inserting a charcoal core to create the hollow void inside the shaft.

In the earlier type there are loops on the socket to help tie the wooden shaft to the head. Over time this develops into two openings incorporated into the base of the blade itself and the shaft is often riveted to the socket. The blade shape also evolves from a kite-shape to a more elongated leaf-shape. We can see the earlier type in the illustration opposite of three spears whose provenance is known as just from somewhere in the county.

Short spear-heads, like the ones illustrated, were likely hand-held thrusting weapons used in man-to-man combat. But the longer slimmer spear-heads were probably for lances, thrown rather than thrust in battle. An example of the latter is the bronze spear-head found on the estate of Mount Zephyr House, Boherbue, in the late 19th century. Robert Day, the noted Cork collector of such artefacts at the time, published an eloquent description of the find as follows: "the man was ploughing a field that had been reclaimed from bogland, when the spearhead was turned up by the ploughshare. It is fourteen inches long, with feather-like, leaf-shaped blades that terminate in loops. The socket, which is three inches long, has six concentric circles round its base, otherwise the weapon is undecorated, but it is beautifully proportioned[25]."

One of the interesting things about this find is that it was found in a bog albeit one under reclamation. There is a clear pattern here that suggests deliberate deposition of artefacts, and especially weapons, into bogs or rivers or lakes; 60% of bronze spear heads in Ireland were found in bogs. One wonders if this had not been a practice in the Bronze Age how many of them we would have today in our museums.

Three bronze spear heads from somewhere in Co. Cork. Image courtesy of Cork Public Museum

Spear head from Mount Zephyr, Boherbue.

ARTEFACT 29

Name: Necklace
Location: Murrahin North, Ballydehob
Material: Amber
Date: 1,000 B.C.
Period: Late Bronze Age
Collection: Cork Public Museum

The picture opposite shows a necklace from Murrahin North, Ballydehob. This was discovered around 1920 when the beads "dropped out of a sod of turf which was being broken for the fire[26]." The collection now consists of sixty eight amber beads but originally may have been as much as eighty. The beads divide into two types, some disc-shaped (on the left in the photograph) and the rest barrel-shaped (on the right), so that there may be two necklaces here originally.

Amber is a resin produced by coniferous trees that has become fossilized over many millions of years. One of the main sources of amber in northern Europe is along the shores of the Baltic Sea where nodules are washed up from offshore deposits. During the Bronze Age an extensive trade in Baltic amber flourished across Europe. By the Late Bronze Age enough was being traded into Ireland for a native amber craft to develop. The main product of this craft was bead production and necklaces with hundreds of amber beads have been found from the period in Ireland.

We have already met amber beads in the context of *grave goods* that also featured gold ornaments, at Knockane (Chapter 5; Artefact 16), and in the Mountrivers hoard (Artefact 26). There seems to be a connection during the Bronze Age between gold and amber in the context of high-status personal decorations. It has been described thus as "a ritually and symbolically significant substance[27]."

Another very interesting find was made in a bog in Milmorane, near Inchigeela, in 1943 that further illustrates this connection between amber and gold. Two amber beads were found and one of them had a short cylinder of sheet gold in the perforation attached by short lengths of twisted gold wire. This is an important find as, according to Mary Cahill, "the Milmorane bead is the only known use of a gold mounting for an amber bead recorded from Ireland[28]". Once again a very important artefact from the Bronze Age is found by someone cutting turf by hand in a bog - would such small artefacts be noticed today when turf is cut by machines?

There is a strong suggestion that amber, especially in its close relationship with gold, had a role in the sun cult of the Bronze Age. Its exotic nature and its deep amber colour must have given amber a special resonance. The fact that some necklaces from the Bronze Age contained hundreds of beads indicates that it was perceived to have properties beyond the simply decorative. Amber also points to the outside links that existed in Bronze Age Ireland. A desirable material like amber was able to find its way through the trade routes that existed then from the Baltic Sea to Ireland, probably not directly but via a number of stops along the way.

Murrahin North amber necklace. Image courtesy of Cork Public Museum.

ARTEFACT 30

Name: Horn
Location: from somewhere in County Cork
Material: Bronze
Date: 1,000 B.C.
Period: Late Bronze Age
Size: Length: 0.90 metres; width: open end 12 cms; narrow end 6 cms
Collection: Cork Public Museum

Bronze horn from County Cork. Image courtesy of Cork Public Museum.

These horns, and there are some ninety examples from the country as a whole, are a uniquely Irish instrument; nothing exactly like them is known from anywhere else in Bronze Age Europe. They come in two varieties, those blown into at one end, end-blown like a hunting horn, and those blown into on the side, side-blown like a flute. The example above is one of the former types. It has two typical features: conical spikes affixed to the outside close to both ends, and a series of holes between the spikes and the two ends. The spikes are probably decorative but the holes must have served to attach pieces at either end, probably a mouthpiece at the blowing or narrow end and an attachment for carrying the instrument at the wider end.

The end-blown horns consist of two or three sections of curved sheet bronze which are riveted together and are open at both ends. The side-blown horns are all cast in one piece with an

oval mouthpiece placed in the side about three inches from the closed end. The consensus is that a wooden or bone mouthpiece was fitted to the narrow end but none of these have survived. These are the productions of a very skilled craftsman who must have had knowledge not only of fine bronze working but also of producing interesting sounds from the instrument.

Simon Ó Duibhir, in conjunction with the National Museum of Ireland, has been experimenting in playing these instruments and suggests they were played in pairs - "the end-blow is played exactly like a didjerydoo, giving a backing drone/rhythm in the fundamental of concert E with a high D relative, while the side-blow produces the melody. Their sound together is full and haunting, evoking the deepest of emotions[29]." A recording of this music is available on the National Museum of Ireland's website.

However, according to Professor O'Brien "it may be a mistake to interpret them as musical instruments as they may have been war trumpets and ritual clarions." He thinks this may be a reason why they were deposited in bogs as *votive offerings*.

The most remarkable find of horns in Cork was made in the early 18th century in a bog somewhere between Mallow and Cork. It consisted of fourteen horns but these were all melted down at the time except for two that are now on display in Cotehele House in Cornwall, a house in the care of the National Trust of England.

In the early Irish hero tales royalty was regularly entertained by a variety of musicians including horn-blowers of which there were two varieties, trumpeters and flute players[30]. It may be just coincidence that the two types of Late Bronze Age musical instruments match these two types of musicians from over a thousand years later. It does suggest that musicians were long valued in royal courts but, judging that their instruments were so often deposited as votive offerings, perhaps they were more of a ritual and ceremonial context in the Bronze Age than the later entertainment role.

Blowing an end-blow horn. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

Artefact 31:

Name: Dress fastener
Location: Cloyne
Material: Gold
Date: 900 B.C.
Period: Late Bronze Age
Collection: National Museum N.I.
Size: Length 12 centimetres

Dress fasteners are a unique Irish Bronze Age ornament though a small number have been found in Britain. They are very similar to bracelets but instead of being circular they are more semi-circular so wouldn't fit easily on a wrist. Whereas the terminals on bracelets are expanded slightly those on dress fasteners are much more widely splayed and often hollowed-out in umbrella fashion. The reason for this design seems to be as a tie in the front of a cloak where the terminals fit into two buttonholes. But this is conjecture as no example has been found with clothing.

They vary enormously in size from 10 to 30 centimetres in maximum length. The pair we met previously in the Mountrivers hoard (Artefact 26) is on the smaller size as is this example from the Cloyne area. As the name suggests they are thought to be worn in the front of a cloak or dress and act as fasteners linked into two buttonholes but there is no definitive evidence for this purpose. It has even been suggested that the smaller example might have been some form of cuff-links. In any case they were worn to be displayed as a show of prestige, however they were worn.

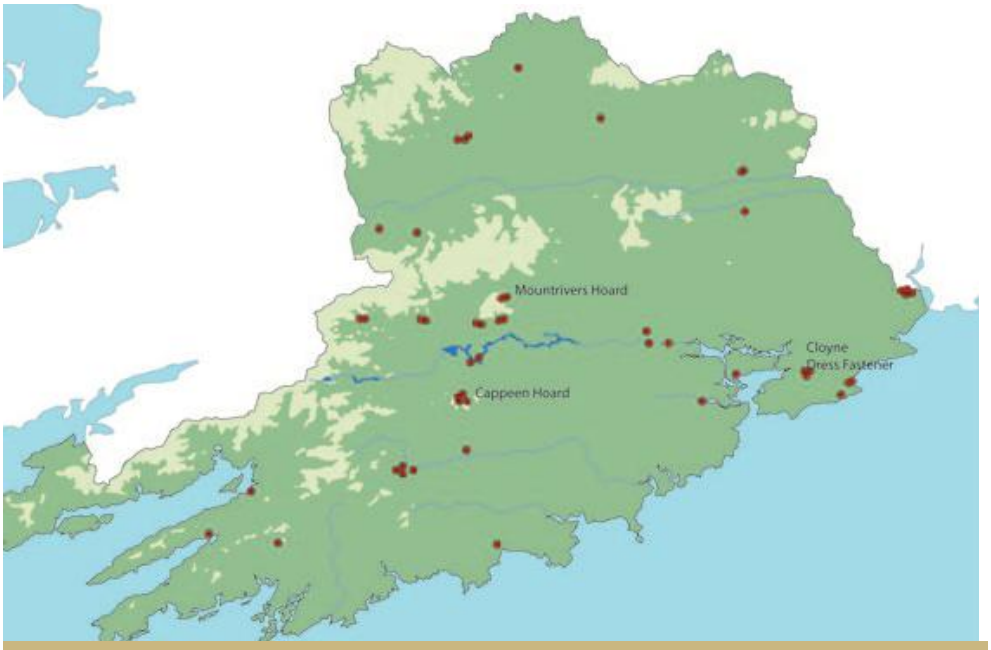
The example was found "near the town of Cloyne"[31] but nothing else is known about it. It was purchased at some stage by the Cork collector of antiquities Robert Day and purchased in 1913 from the sale of his collection. Its crumpled state is typical of many fine gold pieces found

Gold dress fastener from Cloyne. © National Museums NI.

in the 19th century. This was probably to make them easier to carry for sale to a local jeweller who would have given the finder their bullion value; this was in contravention of the law of Treasure Trove which deemed that finds of precious metal were the property of the State. Cork jewellers at the time would know of Robert Day's interest in such items and that he was willing to pay more that the bullion value for an interesting gold piece. Thus priceless prehistoric gold objects were saved from being melted down.

Another gold dress fastener of particular interest is the unfinished example from Inchigeelagh, which may be indicative of a goldsmith's workshop somewhere in the immediate locality. Unfortunately, the find circumstances are poorly recorded and the exact find-place is not known. It is reasonable to suggest that unfinished objects are generally indicative of local production.

Artist impression of person wearing gold dress fastener and lunula. Drawing by Rhoda Cronin.



Map of Late Bronze Age gold finds from County Cork. Mapping by Elena Turk.

Unfinished dress fastener from Inchigeelagh. © National Museum of Ireland.

This magnificent piece is the first stage in the process of making a fastener. The Inchigeelagh piece is an elongated bar with circular expanded ends. This will be shaped further by hammering until the required shape is achieved. The importance of this find is that it indicates there was a goldsmith working in this area of mid-Cork and there is a noticeable concentration of Late Bronze Age gold-work, including the Mountrivers and Cappeen hoards, from the Mid-Cork area.

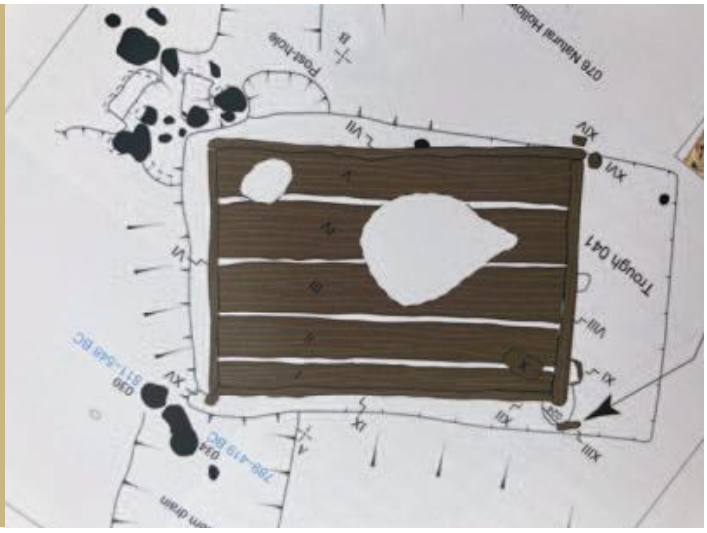
ARTEFACT 32

Name: Timber plank from fulacht fiadh trough
Location: Scartbarry, Rathcormac
Material: Oak
Date: 800 B.C.
Period: Late Bronze Age
Size: Length 1.45 metres; Width 0.22 metres; Thickness 0.05 metres
Collection: National Museum of Ireland

Timber plank from base of Scartbarry fulacht fiadh. Image courtesy of TII.

This is a plank of oak that was shaped by a carpenter using an axe to form part of the trough of a fulacht fiadh at Scartbarry, Rathcormac. The fulacht fiadh is the most numerous prehistoric monument in Cork and indeed throughout the country as a whole. Previously unrecorded examples are frequently identified on nearly all large-scale developments. Timbers like these from excavations do end up in museum collections where they are conserved to ensure their

Plan of timbers forming the trough of the fulacht fiadh; the timber pictured opposite (bottom left) is the topmost one (I) in the bed of the trough



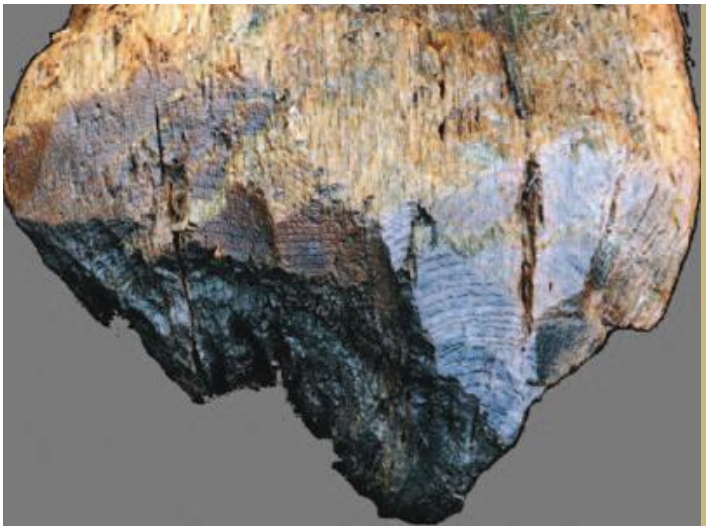
survival. It is unlikely that timber like this will ever be put on display in the museum but are stored in appropriate conditions to be available for future study and analysis when required.

Whatever we know about Bronze Age people in Cork one thing is for sure, they boiled a lot of water. We know this because of the number of fulacht fia in the county - to-date over three thousand examples have been identified - far exceeding the number of these monuments in any other county. The process involves digging a rectangular pit and lining it with planks, clay or stones to make it watertight. The trough is then filled with water and this is brought to the boil by placing hot stones in it from a nearby fire. Experiments have shown this to be an effective way of cooking meat but the hot water may also have been used for other purposes like dyeing wool, or to create some form of sauna or sweat house.

After each boiling session a quantity of heat-shattered stones are left in the trough and these are cast aside so that over time a crescent-shaped mound forms on one side of the trough. If undisturbed these low mounds are recognisable - usually in boggy areas or beside a stream - or if disturbed can be recognised as a distinctive dark spread in a ploughed field. If preservation conditions allow (i.e. the site is waterlogged) the plank lined troughs can survive, often timbers well-enough preserved to see the original axe scars.

An example of this is the fulacht fiadh at Scartbarry, Watergrasshill. This was discovered during archaeological monitoring in advance of works on the M8 motorway. It first came to light as a low mound of heat-shattered stones typical of a fulacht fiadh. It was located in a poorly drained area close to a recent coniferous plantation.

Because of the wet condition of the site the base of a wooden trough was found during the subsequent archaeological excavation of the mound. The rectangular trough, formed of planks of oak timbers, measured 2.22m by 1.36m by 0.38m deep. The base was flat, with the sides formed of fifteen timber planks. The planks were split sections of wood and some had obvious



Timber plank from Scartbarry fulacht fiadh's trough showing axe marks. Image courtesy of TII.

tool-marks, including marks made by an axe. Radiocarbon dates place the use of this fulacht fiadh around 800 B.C., towards the very end of the Bronze Age.

The excavation at Scartbarry has added to our understanding of the prehistoric landscape in the area during the Bronze Age; twelve further fulacht fiadh were identified during work on the Rathcormac–Fermoy section of the motorway, including another example in the townland of Scartbarry. This suggests occupation on a long-term basis in the area in the later prehistoric period, and that these fulacht fiadh played an integral part in the lives of people living around Rathcormac at that time.

Another fulacht fiadh trough excavated as part of archaeological work on the M8 motorway that can be classified as an artefact was found in Killalough, Glanmire. Here a dugout canoe (see Artefact 35, Chapter 8) was reused as the trough of the fulacht fiadh. This fulacht fiadh has a Middle Bronze Age radiocarbon date of c. 1,500 B.C. The trough/canoe was broken into three pieces when found in the excavation but the curved stern is clearly evident.

Fulacht fiadh at Killalough with canoe/trough in foreground. Image courtesy of T.I.I.

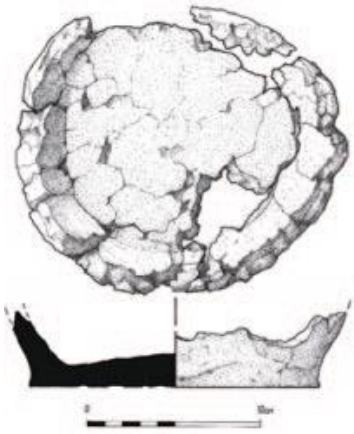
ARTEFACT 33

Name: Burial pot
Location: Killydonoghoe, Glanmire
Material: Pottery
Date: 800 B.C.
Period: Late Bronze Age
Size: Diameter at base: 17 centimetres; Height 4 centimetres
Collection: National Museum of Ireland

Base of the Killydonoghoe pottery vessel that contained cremated bones. Image courtesy of T.I.I.

This site was identified as a number of distinct features of archaeological potential during archaeological work in advance of work on the M8 motorway. The most important of these features was a pottery vessel. This had been damaged in the past so that only the base of the pot and some of the cremated bone that it contained survived. This vessel, though truncated, was clearly flat bottomed and originally had a tub - or bucket-shaped profile. When it was analysed the cremated bone was found to be from at least one adult and the bone showed evidence of a competent cremation technique and the cremated bones had been crushed before being placed in the vessel. The bone recovered appears to represent a token burial, rather than a deposition composed of the entire bone assemblage from the cremation. The burial was contained within a simple pit. The pottery was dated by radiocarbon dating to between 1200 B.C. and 900 B.C., a date range consistent with this type of coarse-ware pottery.

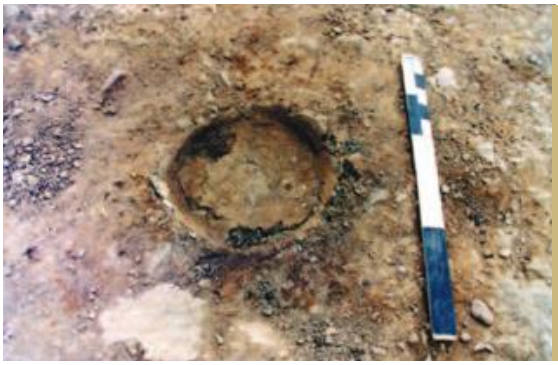
The Killydonoghue burial represents the very end of the Bronze Age burial tradition of placing remains in a pit or cist (stone-lined box) in the ground accompanied by at least one pottery vessel. The tradition changes over time presumably representing evolving ideas about burial and the afterlife. It changes from a crouched inhumation in a cist accompanied by one or two *food vessels*, to a cremated burial in a pit where a large *urn* is inverted over the burnt bones. Throughout this tradition the pottery vessels are distinctive in style and well made and decorated. But here, around 800 B.C., the pot is coarse and undecorated and sited in a small pit with the cremated bone placed inside it. As we move further into the Iron Age finding burials become much more difficult. By then pottery is no longer being made locally and perhaps most cremated remains were just scattered to the four winds - not much for the archaeologist to find in those



Plan and section drawing of the Killydonoghoe pottery vessel.

instances! Whatever the case it seems that the burial of important persons in a distinctive form of ritual and deposition was no longer being practised by the end of the Bronze Age.

This is a unique find as very few cremations with this type of pottery have been found. The pot is small and the pit in which it was placed small so we are not talking about a great deal of effort being made over the form of the burial. It may be that we are dealing with the burial of someone lower down the social ranking than those buried with more formal vessels like *food vessels* or *urns*. But the late date suggests we are close to the very end of the *single-burial* tradition that lasted throughout the Bronze Age but by 800 B.C. was almost finished.



Photograph of pottery vessel after the cremated bone was removed. Image courtesy of TII.

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Chapter 8
A Time of Darkness
The Iron Age (600 B.C.- 400 A.D.)

The absence of recognisable monuments of Iron Age date in the Cork landscape makes the search for where people lived and worked at that period a difficult task. However, recent pipeline, infrastructure and road schemes have given archaeologists the unprecedented opportunity to find evidence "under the sod" for this period. But unlike for the previous Bronze Age and the subsequent Early Christian period, actual settlements with evidence for houses and enclosures just haven't turned up for the Iron Age. But what is found are places where small-scale iron smelting was carried out in the form of the below-ground remains of pit furnaces. These are evidence for local self-sufficient iron production, probably farming communities making just enough iron tools for their own needs.

We don't know if the knowledge of smelting and forging iron was brought into the country by foreigners or if the technique was somehow learnt by native metalworkers. Iron is very different from bronze and a bronze smith would need to learn a lot of new skills to work with this new metal, for example, iron cannot be cast in a mould. Notwithstanding this, some of the basic principles are the same. An attractive feature in iron to an Irish smith was the ready supply of iron ore throughout the country, mostly in the form of bog ore, and the fact that it did not need to be alloyed with another metal like in bronze production where tin had to be imported from Cornwall to alloy with native copper. Iron was smelted in a slag-pit furnace and a number of these were found during archaeological excavations by T.I.I. in advance of the M8 motorway.

The smelting process produces a sponge-like mass called a bloom. This was then hammered on an anvil, reheated, then hammered again until the iron was ready for forging into whatever tool or weapon was required. If a blade was required, the iron was further heated and hammered until a lasting cutting edge was produced. These were the great advantages of iron: it was a cheap and easily sourced raw material and the implements produced were stronger and sharper than anything a bronzesmith could produce. Iron thus became the go-

Iron Age smithy with iron being smelted in a furnace and forged on a wooden anvil. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

Triskel.

Interlace pattern.

to metal for tool and weapon production, but bronze remained the choice for finer work like horse-bits and decorative pieces like the Cork Horns.

After the abundance of the Bronze Age, the paucity of Iron Age archaeology comes as something of a jolt - especially when this had traditionally been thought of as the great age of *The Celts*. Now that the study of ancient DNA has revealed that the last great prehistoric invasion of new peoples into Ireland was in the Late Neolithic/Early Bronze Age period, 2,500 B.C. to 2,000 B.C., the search for evidence for a *Celtic* invasion seems more futile that ever. If we take *The Celts* as those peoples that Julius Caesar encountered and conquered in Southern Britain and Gaul (France) then a clear archaeological footprint should mark their invasion of Ireland. For example, these people were great potters but not a sherd of that pottery has been found in Ireland. *The Celts* also lived in *hillforts*, distinct hill-top enclosures with well-built defensive ramparts. Recent studies of *hillforts* in Ireland by the Discovery Programme and by Professor O'Brien of U.C.C., including his excavation at Clashanimud (see previous chapter), place their construction and use in the later Bronze Age period (1,400 B.C.– 800 B.C.).

But what Ireland does have in archaeological terms is a collection of bronze and iron artefacts decorated in a distinct *Celtic* style. The first of these styles is termed *Hallstatt* and the second, *La Tēne*; the names conveying their origins on the European mainland (Hallstatt is in modern-day Austria, La Tēne is in Switzerland). *La Tēne* becomes the basic art style developed in Ireland in the later Iron Age and into the Early Christian period. It becomes distinctly Irish in form and fashion and is the basic template used in great artworks like the Book of Kells; the Tara Broach and the Ardagh Chalice. Patterns like interlace and the triskel are examples of *La Tēne* art that are used widely in later Christian art. The *trumpet curve* is another popular motif as used on the Cork Horns (see *Artefact 34*).

Compared to other counties, particularly those in the northern half of the country, Cork is very poor in terms of the amount of Iron Age artefacts that have survived. Admittedly it has one of the great *La Tēne* treasures in the Cork Horns, but otherwise three horse-bits are the bulk of it.

In terms of monuments there is really only one that has produced a definite Iron Age date when archaeologically excavated but this is also the largest monument in the county - the *Cliadh Dubh*. In 1993, as part of the Discovery Programme's Ballyhoura Hills Project, Martin Doody excavated a section of the earthwork, at a location about 2 miles south-west of Ballyhooly, in the Nagle Mountains. The excavation revealed an earthen bank topped by a wooden palisade and on its western side was a deep ditch so that the earthwork presented a formidable obstruction, facing to the west. When this construction is stretched across the valley

to the Ballyhouras, then "the scale of the monument across the Blackwater Valley is far greater than was previously thought[1]." There were no finds from the excavation, but a radiocarbon date placed the construction of this boundary to the early centuries B.C. The reason for undertaking such a large-scale project in the Iron Age is a matter of conjecture but one wonders if it may have been built by the wealthy farmers of the Golden Vale to hamper their wilder neighbours to the West from stealing their cattle; by the dawn of history cattle raiding is an endemic feature of tribal society in Ireland. Doody's excavation indicated that the boundary went out of use by c. A.D. 100. By then, it would appear, there was enough security in North Cork for this extraordinary territorial boundary to be abandoned.

What about recent archaeological excavations on road schemes, pipelines and other large-scale developments - have these shed light on Iron Age Cork? Nothing on the scale of the houses and settlements we met in the Neolithic and Bronze Age has been found but there is scattered evidence, most of it in the form of the remains of small-scale iron smelting. Knowledge of iron production had reached Cork by about 300 B.C. Bog ore was plentiful and the method to extract iron from the ore was quickly mastered so that "many farming communities were soon able to acquire the basic knowledge of smelting and the ability to forge and repair iron objects[2]."

As part of a study into prehistoric landscapes on the Beara Peninsula, a team from U.C.C. led by Professor William O'Brien excavated a hut-site and an enclosure, in 2002 and 2003, both of which produced Iron Age radiocarbon dates. An interesting fact was the absence of any finds from the excavation with the exception of some blue- glass beads (see Artefact 38); either the inhabitants were very tidy or very frugal. The two sites were not contemporary, the hut produced a radiocarbon date of c. 650 B.C. but the enclosure dated to between 70 B.C. and 340 A.D.

Towards the end of the Iron Age, 100 – 350 A.D., Cork is a place of scattered and impoverished settlements; farming is suffering the effects of poor climatic conditions and soil-exhaustion. But things were about to change and from about 450 A.D. onwards we see a dramatic increase in population and social activity, marked by two important arrivals - literacy and Christianity.

Iron Age Pit furnace slag.

ARTEFACT 34

Name: Iron slag
Location: Trantstown, Watergrasshill
Material: Iron slag
Date: 300 B.C.
Period: Iron Age

Ugly to look at with no pretentions to be anything else, in fact no more than a piece of discarded rubbish, this lump of iron slag may seem like a very unlikely candidate as a featured artefact but it does have a story to tell and it tells that story by just being itself - the waste product of an Iron Age iron furnace.

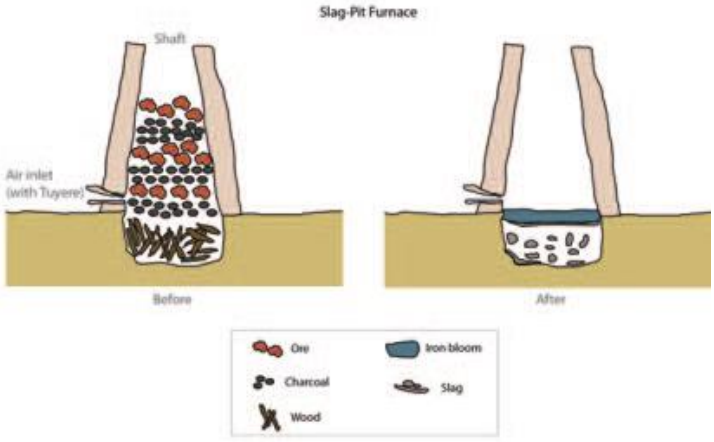
The absence of recognisable monuments of Iron Age date makes the search for where people lived and worked at that period a difficult task. However, recent archaeological investigations in advance of infrastructure works have given archaeologists the unprecedented opportunity to find some evidence for this period. Little remains of their settlements such as houses or enclosures survive, but further examples have been found. What is generally found are places where small-scale iron smelting was carried out in the form of the below-ground remains of slag-pit furnaces and associate slag, like this example in the townland of Trantstown, discovered and archaeologically excavated by T.I.I. as part of the M8 motorway project.

The process of iron smelting begins with the collection of iron ore either from a rock source or from a bog (lumps of iron ore form naturally in peat). The ore is then heated to a high temperature in a furnace, separating waste slag from bloom; bloom is a spongy mix of slag and iron. This bloom is then repeatedly heated and hammered on an anvil in a smithy to remove the remaining slag until a usable piece of iron is made. The blacksmith will then use this iron to forge, by further heating and hammering, the required tool or weapon.

What survives at Trantstown is the below-ground section of the furnace - a steep-sided sub-oval pit (diameter 0.4 meters; depth 0.36 meters) with a clay lining. The sides of the clay lining have been turned an orange colour by the heat of the furnace. When excavated the fill of the pit consisted of a black deposit of iron slag and a black silt layer containing oak charcoal. A sample of this charcoal produced a radiocarbon date of around 300 B.C.

There were 127 pieces of slag (totalling 3.9 kg) from the Trantstown excavation, indicating repeated use of the furnace. Five pieces of this slag were scientifically analysed by Dr. Effie Photos-Jones of the Scottish Analytical Services for Art and Archaeology, in Glasgow.

Iron Age pit furnace at Trantstown, Watergrasshill; a quarter of the clay lining has been removed; the orange colour on the sides was produced by heat when the iron ore is being smelted (scale in centimetres). Image courtesy of T.I.I.



Diagrams of slag-pit furnace, before (left) and after (right) smelting. Drawing by Dr. Elena Turk.

According to Photos-Jones *'…the slags are manganese-rich fayalitic slags. The source of iron must have been the non-crystalline iron oxy-hydroxide otherwise known as bog ores…the technology is primitive, limited not by the skill of the smith but by the primitive design of the furnace[3]'*. Photos-Jones also noted that the profile of one of the pits at the site *'…is of interest since it appears to make allowances for a space for the slag to run and therefore for the bloom to grow. If that is the case it would 'herald a development in early bloomery furnace technology'*.

Some dozen sites like this - a single or sometimes a small scattering of smelting pits - have now been identified in County Cork. This is small-scale production where local communities are producing just enough iron for their own needs. There is no evidence for an organised trade in iron at this period and the evidence from these scattered smelting pits suggests nothing more than local self-sufficient production.

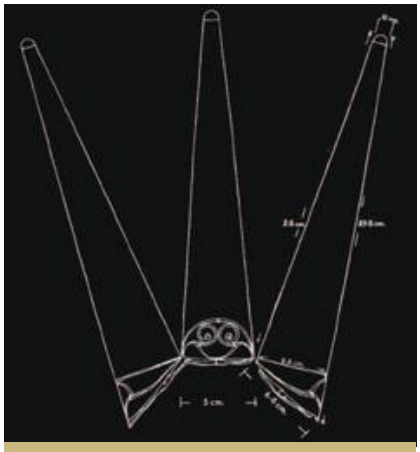
ARTEFACT 35

Name: Cork Horns
Location: Cork City
Material: Bronze
Date: 50 A.D.
Period: Iron Age
Size: Length 25 – 30 centimetres
Collection: Cork Public Museum

Cork Horns on display in the Cork Public Museum. Image courtesy of Cork Public Museum.

In 1909, during works on a sewage tank on the eastern side of Cork City, a remarkable discovery was made. Working on a deep excavation below the water table, one of the workmen "brought up on his shovel a very slender metal cone ... later in the day two other similar cones ... were dug up at the same place[4]." This area, in the vicinity of the present roundabout at the junction of Victoria Road with Centre Park Road, was reclaimed slobland once covered by high tide. It was also reported that some material, possibly decayed leather, was attached to the cones but had been discarded. Thus, one of the most remarkable artefacts of the Iron Age in Ireland and one of the great Treasures of Cork, first came to light. It is now on display in Cork Public Museum.

The three cones are each made from a sheet of thin bronze curved over and held by a series of rivets to make the shape. The base of each was flattened outwards to form a flange that was then riveted onto whatever material formed the helmet to which they were attached; the



Drawing of the three horns showing size and decoration.

Rivets along the join on the horn. Image courtesy of Cork Public Museum.

On top is the pattern on either side of the central horn; below is the pattern on the side horns (these are not flat as drawn but curved on the horns)

way these flanges fit together gives the arrangement of a central horn on top with one on either side slightly lower down on the side. The open top of each horn was closed by a neatly fitted bronze cap. The decoration is kept to just around the base of each horn. The central horn has an identical symmetrical pattern on either face. There is a slightly different pattern to the central one on either side horn, that widens to reflect the sloping position of each horn.

The decoration is typically *La Tēne* or *Celtic* in style. The side horn's decoration features trumpet curves, that is curved features that are wide at one end and curve back to a slender point. The central pattern also has trumpet curves but also a pair of *triskels* where the trumpet curves into a spiral pattern. These patterns stand slightly proud of the curved surface of the horn. In his scientific study of the artefact, Professor O'Kelly concluded that this effect was achieved by the very delicate paring back of the horn's surface to leave the pattern standing proud in false relief[5].

O'Kelly compared the techniques and the decorative motifs used in making the Cork Horns with another masterpiece of the Irish Iron Age - the *Petrie Crown*. The *Petrie Crown* was, as the name suggests, worn on top of the head and has horns somewhat similar to those on the Cork Horns.

Artist's impression of the Cork Horns as a head-piece. Drawing by Rhoda Cronin.

Professor Barry Raftery, a leading expert on the Irish Iron Age, dates these two artefacts to the first century A.D. and suggests they may have been the work of the same bronze workshop, though the providence of the *Petrie Crown* is unknown (it is now on display in the National Museum of Ireland). However, he had some reservations regarding O'Kelly's description of how the Cork Horns were decorated as *"such a technique would have demanded quite incredible skill and the use of graving tools of exceptional fineness and sharpness ... we cannot discount the possibility that the designs were in fact cast and finished by tooling*[6]*."*

Though found in reclaimed land, O'Kelly suggests the Cork Horns may originally have been dropped from a boat into the Lee River at a high tide. If this was the case they join the myriad of other bronze objects deposited into rivers and lakes going back to the earliest days of the Bronze Age. If such they are probably a *votive offering* to whatever watery god the people of Iron Age Cork had worshiped. But who would have worn such a thing on their head? They are far too delicate to be a warrior's helmet. They could have been part of a crown but probably more likely a shaman's headpiece worn on special ritual occasions. Eamonn Kelly of the National Museum of Ireland compares the Cork Horns to a figure wearing deer antlers on his head as depicted on the Gundestrup Cauldron, a famous Celtic artefact from the Iron Age in Denmark. Thus he sees the Cork Horns as *"likely to be a representation of the Celtic fertility god Cernunnos ... and may have been worn on special ritual occasions where they expressed concepts of fertility and renewa*[7] *."*

The Cork Horns are the greatest artefact of the prehistoric period in Cork, not alone in terms of their exquisite craftsmanship, but also as they give us a tantalising glimpse into a lost world of pagan ritual and veneration. How they ended up in the waters of Cork Harbour will never be known - perhaps an accident when some shaman fell from his dug-out canoe and drowned whilst extolling the watery gods of the river, or were they deliberate dropped into the river as an offering to the same gods?

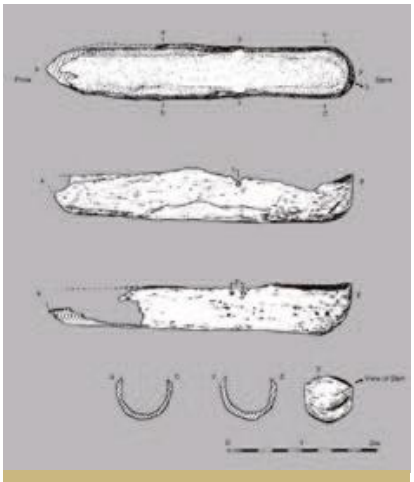
ARTEFACT 36

Name: Log Boat
Location: Comeenatrush Lake, Curragh, Millstreet
Material: Oak
Date: 450 A.D.
Period: Late Iron Age
Size: Length 5.15 meters; Width 0.8 meters; Height 0.7 meters
Collection: Comeenatrush Lake, near Millstreet

Dugout canoe as recovered from Comeenatrush Lake.

In September 1992 a mechanical excavator working along the shoreline of Comeenatrush Lake recovered a dugout canoe from the black peaty mud of the lake. Comeenatrush is a very small corrie lake (max. width 150 meters) in the Derrynasaggart Mountains to south of Millstreet. The boat was hollowed out from the trunk of an oak tree and when found, the stern was intact but the prow was damaged.

The shape of the boat is curved reflecting the shape of the hollowed-out trunk it was made from, with a rounded stern and a pointed prow. The walls are thin, barely a centimetre thick in places though much thicker at the stern. There are two shallow vertical grooves in the inner side walls towards the stern that line-up with small horizontal grooved holes near the top of the sides, two on one side, one on the other. There is also another grooved hole on the stern. These must in some way have facilitated a seat for the canoe's paddler though how exactly this worked is not clear.[8]



Plan, elevations and sections of the Comeenatrush boat.

Some 350 dugout canoes have been found in Ireland, mostly from lakes in the north midlands and mid Ulster areas. Six or so have been found in Cork, the latest find being one reused as the trough of a fulacht fiadh in Killalough, Glanmire, though that example was much damaged by modern drains; this site was archaeologically excavated as part of the M8 preparatory works[9]. Another canoe that may have served the same purpose was found in the 1890s in Kilbrenan, Crookstown. This was found five feet below the surface in a fulacht fiadh mound in a horizontal position suggesting it too has been reused as the

Kilbrenan dugout canoe, figure is sitting at the stern.

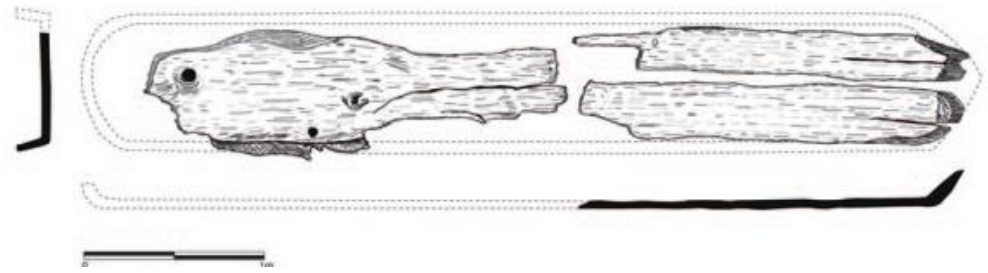
Dugout canoe being used for spear fishing. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

trough of the fulacht fiadh; it was described when found as 11 feet long, 20 inches wide and 28 inches high[10].

More recently a dugout canoe was found in 1978 during dredging operations in Lough Rahavarrig, Castlefreke, Clonakilty[11]. It had been found in the lake (now a wet fen), during dredging operations and was intact when found but broke into four parts along its axis and across the middle when taken ashore. The canoe has parallel-sides with square ends; its longitudinal section is flat-bottomed with inclined ends, while its cross-section is also flat-bottomed with flared sides[12].

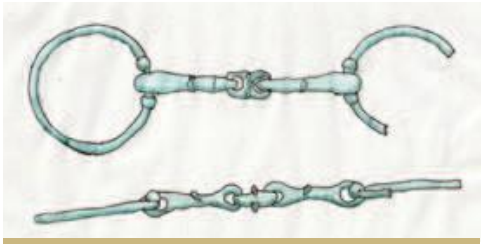
A radiocarbon date for the Comeenatrush boat dates it to around 400 A.D., right at the end of the Iron Age. Dates for similar boats in Ireland range from the Bronze Age through to the seventeenth century; the boats are all very similar is shape and form, though differing greatly in length, and are not datable to any particular period in appearance alone. The Comeenatrush boat is interesting in that it was found in such a small lake (barely 150 meters across at its widest) and one wonders what it was used for when it was as quick to walk around the lake as to paddle across it. Pochin Mould suggests it may have been used to access some form of platform structure in the lake[13] but such a structure will long ago have melted back into the lake. Perhaps they were just used to fish in the lake and in nearby rivers. Though heavy now when taken from the lake because the wood is waterlogged, these canoes were much lighter when originally constructed and could have been carried from the lake to nearby rivers for further use.

Drawing of Rathavarraig log boat - by Elaine Lynch.



ARTEFACT 37

Name: Horse bit
Location: Tracton Abbey, Carrigaline
Material: Bronze
Date: 200 B.C.
Period: Iron Age
Size: Overall length 30 centimetres; Ring diameter 8 centimetres
Collection: National Museum of Scotland



Tracton Abbey horse bit.

The great migration of people into Ireland in the Early Bronze Age (see Chapter 5) also seems to have brought horses into the country; there is no evidence that there were native horses in Ireland after the last Ice Age. A few horse bones have turned up in Bronze Age excavations, often in a very fragmentary condition, and as likely food residue than evidence of horses being used for riding or transport. It really isn't until the Iron Age that there is certain evidence of horses being used as harnessed animals. This comes in the form of bronze bits that form the mouthpiece of a horse harness. Some 140 of these have been found in the country and are the single most numerous metal artefact from the Iron Age in Ireland. Just two are from County Cork[14]. Both of the Cork pieces were found in the early 19th century, one in the townland of Loughane West, Blarney, now in the National Museum of Ireland, and the other at Tracton Abbey, Minane Bridge, now in the National Museum of Scotland. Only the find place for the Loughane West bit is known - it was discovered six-feet beneath the surface of a bog. This therefore brings us back to the idea of a *votive hoard* being the likeliest reason for its being in the bog in the first place; some ten of the bits from the rest of the country were also found in bogs and a number are from rivers.

These bits belong to a wider Iron Age group of horse harness parts but the Irish ones are distinctive and developed a distinct insular character. They are dated by the decoration applied to some examples which is distinctly La Tēne in character and places their manufacture and use from about 300 B.C. into the early centuries A.D.; they are the most numerous group of La Tēne artefacts in the country.

Three-link bit consisting of a central link (yellow), two side links (blue) and two side rings (red), stop studs (purple).

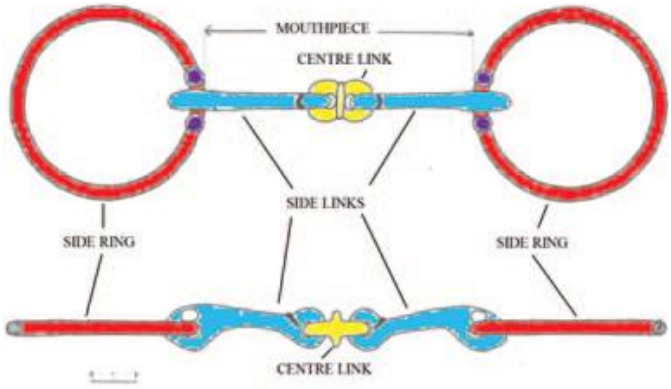


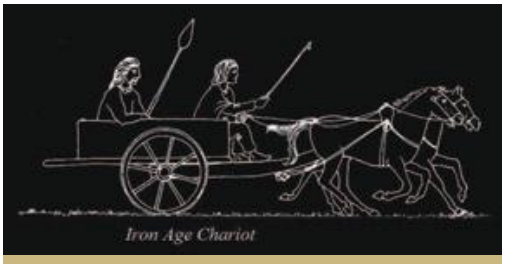
Photo of a typical three-link Irish bronze horse bit. Image courtesy of Cork Public Museum.

The bit consists of five components of cast bronze: a central link, two side links and two side rings. Each side ring has two stop studs to prevent rotation when attached to the side link. The bit is small and comparable in size to the bits of modern Shetland ponies, suggesting that the Iron Age horse was small in stature.

Some of the bits show heavy wear and some have been repaired a number of times indicating these were much-used and valuable artefacts. A number were also found in pairs. These facts indicate that some of the horses were worked in pairs and that the use of horses was both commonplace and important during the middle and later parts of the Iron Age.

The earliest writings in Old Irish were copied by monks in the 11th/12th century from earlier 7th/8th century writings that in turn were drawing from earlier sources that go back at least into the later Iron Age. So what do these early sources say about horses and their use? Professor David Greene, of the Dublin Institute for Advanced Studies, found enough evidence for the use of chariots (*carpat*) to reconstruct what one may have looked like and the terms used to describe its various parts[15]. The vehicle was two-wheeled (*dá ndroch*) was pulled by a pair of horses (*dá ech*) and driven by a charioteer (*arae*) with the warrior (*eirr*) at the back. These were not so much war chariots as a vehicle that carried warriors to combat and then away afterwards with the spoils of war. Apart from the bronze bits very little of these chariots have survived, there is a single wooden wheel from a bog in Roscommon and a few timbers, also from bogs, that may be parts of the wagon.

Reference to the riding of horses is much scarcer in the early sources than for chariots. The reason for this may be because the epic stories, which form the bulk of the early material, *"were essentially concerned with elite warriors who could afford chariots as prestigious weapons, while horse-riding, which was regarded as less prestigious, was excluded from the arsenal of epic heroes.[16]"*

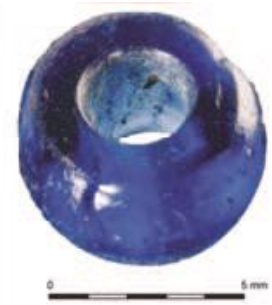


Iron Age chariot.

Horse-bits made of bronze were prestigious items of high value and give us a tantalising glimpse into life in Iron Age Cork.

ARTEFACT 38

Name: Blue glass bead
Location: Muckridge, Youghal
Material: Glass
Date: 200 A.D.
Period: Iron Age
Size: Overall diameter 6 millimetres
Collection: National Museum of Ireland



Blue glass bead from Muckridge, Youghal. Image courtesy of T.I.I.

The surge in archaeological investigations on national road schemes in recent years has identified a number of Iron Age sites in areas where previously there was very little if any archaeology of that period as seen at Trantstown in Artefact 34. Another example is that discovered in Muckridge townland, just north-east of Youghal, in advance of the construction of the N25 Youghal Bypass, which had this very this interesting find associated with the iron works[17].

During the excavation of an area with evidence for iron working, in the form of iron slag, a flash of vibrant blue colour caught the eye of one of the excavators. This turned out to be a beautiful but very small glass bead. This was the first time any of the Iron Age sites archaeologically excavated along the routes of national road schemes in County Cork had produced an artefact. These sites mostly consist of the remains of iron smelting in the form of the remains of clay-lined furnace bottoms and lumps of iron slag (a waste product of iron smelting). These were confirmed to be Iron Age on the basis of radiocarbon dates. Iron working becomes common in County Cork from 300 B.C. onwards; the site in Muckridge that produced the glass bead was radiocarbon dated to around 200 A.D.

Glass first appears in the third millennium B.C. in Egypt when used to coat statues with a blue or green vitreous layer of glaze. However, it is not until the Late Bronze Age that glass beads are known in Ireland but these become more widespread in the Iron Age and especially in the Early Christian period. It is assumed that all of these are items of personal adornment. It is very difficult to tell on appearance alone between an Iron Age bead and one from the Early Christian period. It also seems to have been the case that beads were kept as heirlooms so that a late Iron Age bead may well turn up in an Early Christian context. This is why the Muckridge bead, from a securely dated Iron Age context, is so important.

Analysis of the trace elements in glass beads using X-ray techniques is producing very interesting results in terms of classifying ancient glass beads[18]. According to Middleton *"bright blues are common colours in ancient glass, often achieved by adding cobalt to the glass during its production. Blues which can range from a very pale hue to a bluish-green can also be achieved by adding copper oxides to the glass[19]."* There is no evidence that glass beads like this were being manufactured in Ireland during the Iron Age but analysis of their chemical composition may eventually reveal to scientists where they were made, whether locally or abroad.

Dumb-bell glass beads from the archaeological excavation of an enclosure in the Barrees valley, Beara. Image courtesy of Prof. William O Brien.

Some iron Age beads were also found during archaeological excavation of an enclosure in the Barrees valley on the Beara peninsula by Prof. William O'Brien in the early 2000s. Radiocarbon dates place the occupation of the enclosure to around the 5th century A.D., so towards the very end of the Iron Age. These are of the *dumb-bell* variety and bluish in colour.

Though humble in form and size, the occurrence of glass beads with high-status burials and at royal sites in Ireland during the Iron Age suggest that these artefacts were regarded as exotic and prestigious items; though usually found on archaeological excavations as a single item they were, when in use, part of a necklace or bracelet. Their small size makes them easy to lose but difficult to find, which may explain why just the one is often all that is found. We can imagine a bracelet belonging to someone who worked at or was visiting the ironworking site at Muckridge becoming loose and the beads spilling onto the floor - they were all found then except for one which would eventually be found - but just two thousand years later!

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[2] O'Brien, W. (2012) Iverni: A Prehistory of Cork, The Collins Press, Cork, 240

[3] National Roads Authority, & Transport Infrastructure Ireland. Archaeological excavation report, 01E0501 Trantstown AR29, Ballinvinny North AR26, Killydonoghoe AR3, AR4, AR5, AR6, AR10, AR11, AR12, AR13, County Cork, Digital Repository of Ireland [Distributor], Transport Infrastructure Ireland (T.I.I.) [Depositing Institution], https://doi.org/10.7486/DRI.tb09xm535

[4] O'Kelly, M.J. (1961) 'The Cork Horns, the Petrie Crown and the Bann Disc', JCHAS 66, 1-12

[5] Ibid., 7-8

[6] Raftery, B. (1994) Pagan Celtic Ireland: The Enigma of the Irish Iron Age, Thames and Hudson, London, 155

[7] E.P. Kelly (2002) 'The Iron Age', in P.F. Wallace and R Ó Floinn (eds) Treasures of the National Museum of Ireland: Irish Antiquities, Gill and McMillan, Dublin, 131

[8] Pochin Mould, D.D.C. (1992) 'The Cumeenatrush Boat', Mallow Field Club Journal 10, 123-127; Cleary, R.M. (2003) 'Note on a logboat from Comeenatrush Lake, Curragh townland near Millstreet, Co. Cork', JCHAS 108, 141-146.

[9] Hanley, K and Hurley, M.F. (2013) Generations: The archaeology of five national road schemes in County Cork, NRA Scheme Monographs 13, 124-128.

[10] Gillman, H.W. (1897) 'Ancient canoe found in County Cork', JCHAS 3, 34-36

[11] Information on this find from The Topographical Files in the National Museum of Ireland

[12] Gregory, N.T.N. (1997) A Comparative Study of Irish and Scottish Logboats, unpublished PhD thesis, University of Edinburgh, 311

[13] Pochin Mould, D.D.C. (1992) 'The Cumeenatrush Boat', Mallow Field Club Journal 10, 124

[14] Haworth, R. (1971) 'The Horse Harnesses of the Early Irish Iron Age', UJA 34, 26-49

[15] Greene, D. (1972) 'The Chariot as described in Irish Literature', in C. Thomas (ed.) The Irish Age in the Irish Sea Province, CBA Research Report 9, London, 59-74

[16] Mallory, J.P. (2016) In Search of the Irish Dreamtime: Archaeology and Early Irish Literature, Thames and Hudspn, London, 221

[17] Hanley, K and Hurley, M.F. (2013) Generations: The archaeology of five national road schemes in County Cork, NRA Scheme Monographs 13. 165-167

[18] Warner, R. and Meighan, I.G. (1981) 'Dating Irish Glass Beads by Chemical Analysis' in D. Ó Corráin (ed.) Irish Antiquity, Tower Books, Cork, 52-66; Middleton, S. (2015) The classification and characterisation of archaeological glass using multi-element analysis, unpublished MSc thesis, Institute of Technology, Sligo

[19] Middleton ibid., 92

Chapter 9
Cork's Second Golden Age
The Early Christian/Early Medieval Period (400 A.D. - 1200 A.D.)

"What did the Romans ever do for us?" This well-known quote from the film *The Life of Brian* would seem more appropriate to a country that was part of the Roman Empire than somewhere like Ireland, which was not. But Roman influence was far reaching outside the borders of their Empire. By the 5th century A.D. these influences had taken hold in Ireland and are evident in the monuments and artefacts of the period: literacy in the form of ogham stones; Christianity in the form of churches, monasteries and religious art and technological advances in metallurgy and milling.

The earliest evidence of literacy in Ireland is ogham, a script in which notches along a stem line represent letters of the Latin alphabet. This script was cut along the edge of upright stones, read from bottom upwards. The inscriptions are a person's name in the genitive case, meaning "(this is the stone of) X son of Y." The language of the inscriptions is the oldest form of the Irish language, what is termed *Late Primitive Irish*[1], and the earliest are probably pre-Christian in date, perhaps going back to the 4th century A.D. They are most numerous in counties Cork and Kerry - were the people of the South-West ahead of the rest of the country in reading and writing? Once you are literate a whole new world becomes available and in the 4th century A.D. this meant access to Christianity - very much a religion of the book. The earliest surviving manuscripts, like the Psalter of St. Columba, date back to about 600 A.D. showing that by then books are not only being read but also written in Ireland.

Within a short period of Christianity becoming established in the country, monastic centres were being founded and these would dominate the local church until the reforms of the 12th century, which replaced them with the diocesan system. Nearly all of these monasteries had a founding saint whose name became synonymous with the place. Some of these go back to the very beginnings of Christianity like Saint Ciáráin of Oileán Chléire (Cape Clear), operating in the county by the late 4th century A.D.[2] By the sixth century the church is growing rapidly and begins to establish many new monastic centres. A notable example is *Cluain Uama* (Cloyne) where Saint Colmán established a monastery on a new site around 570 A.D.[3] Other

Artist's impression of an Early monastic enclosure. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

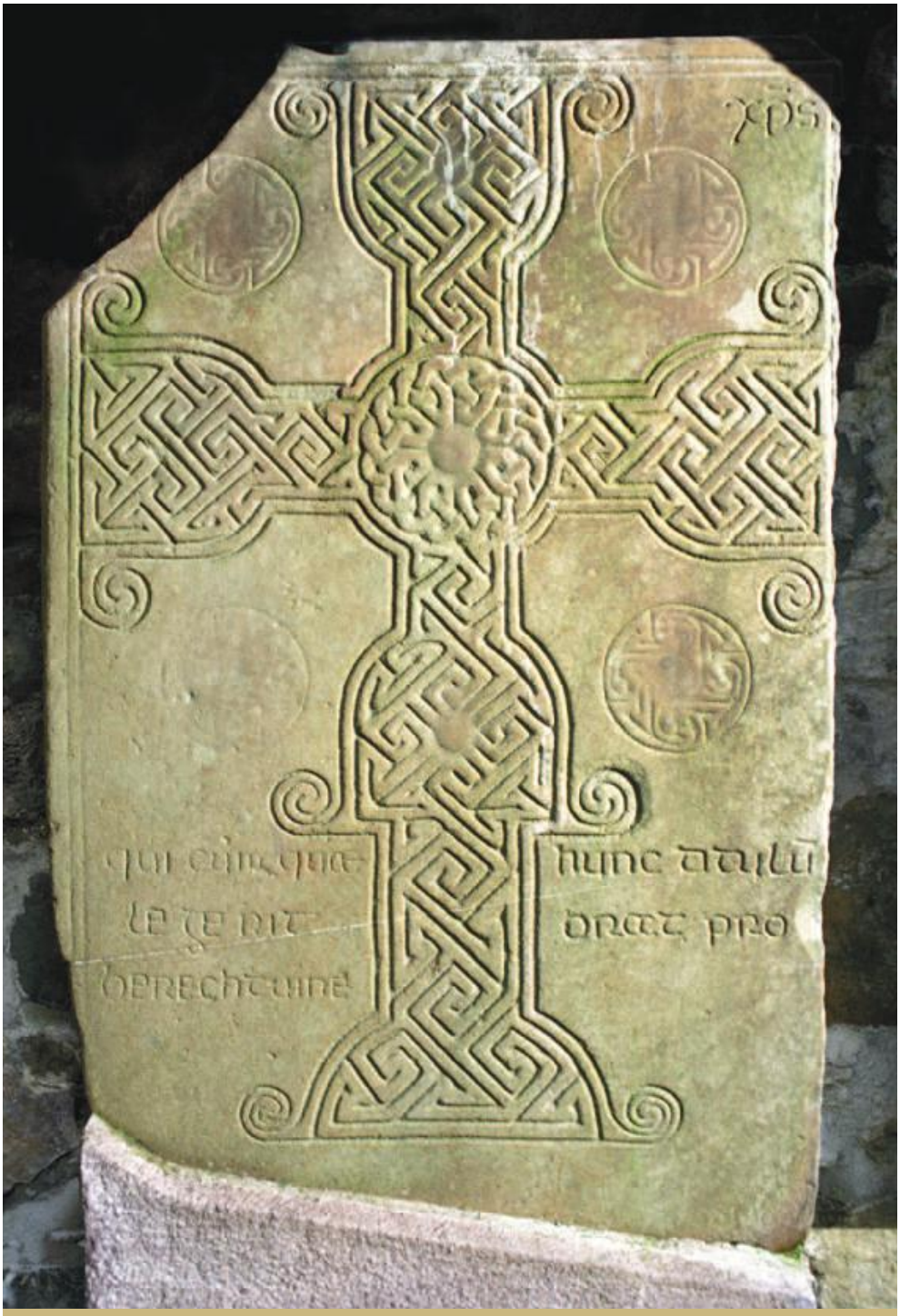
associations of a founding saint with a monastic site include Saint Finbarr and Cork, Saint Berichert and Tullylease, Saint Olan and Aghabulloge, Saint Gobnait and Baile Bhuirne and Saint Lachtin and Donoughmore.

These monasteries were defined by a large circular enclosure, the *vallum*, within which all the religious and other structures belonging to such a busy place were located. These included a church, shrines and chapels dedicated to the founding saint and his relics, carved crosses and cross-slabs; if an important monastery a round tower and a high cross, a burial ground, a school and a scriptorium for making and copying religious books. Also within the enclosure were barns, granaries and a dairy for the monastery's farm, as well as a forge and craft workshops, and accommodation for all who lived and worked there. These monasteries have been described as the nearest thing to an urban centre that existed in Early Christian Ireland. In the later medieval times, some of these developed into settlements like Rosscarberry and Cloyne while most shrunk back to just a graveyard and a parish church; there are numerous examples of these across the county such as Bawnatemple Canovee and Kilmacoo near Kanturk as highlighted in a previous book[4] where the graveyard occupies just a small place at the centre of the much larger monastic enclosure.

Very little archaeological excavation has taken place at these early monastic sites in County Cork with the notable exception of Professor O'Kelly's work at Baile Bhuirne in the 1950s[5]. His excavation of a circular hut, known as St Gobnat's House, revealed this to be the workshop of a metalworker. However, Cork is singularly lacking in surviving religious artefacts made of precious metals until the 12th century when we have exceptionally high-quality artefacts in Saint Lachtain's Arm and the Cloyne Cross.

There is tangible artefact evidence for the early church in Cork: - these are the *cross-slabs* of which the county has some twenty-eight examples, including perhaps the most elaborate and finely carved in the entire country, at Tullylease[6]. Known as Saint Berichert's Stone it has been described as "possibly the finest Early Christian decorated cross-slab" in Ireland[7]. The slab dates to the 8th century and has been compared in its decoration to a page in the Lindisfarne Gospel. There is an inscription on the stone in Hiberno Latin, which reads in translation: *whoever will read this inscription let him/her pray for Berechtuine*; Saint Berichtert is a seventh century Saxon saint and mention of this name brings Tullylease into the orbit of the wider Christian world. But not all cross-slabs were as elaborate as Saint Berichert's Stone and many are decorated with just a cross alone, like the example from Bawnatemple, discovered in the 1970s.

Many of the artefacts from the Early Christian period found in archaeological excavations in Cork, especially at the important excavations of the ringforts at Garranes and Garryduff, are evidence of craftsmanship, especially in gold, bronze and glass workings. The Garryduff Bird, a tiny piece of exquisite design, is a tantalising glimpse of what goldsmiths in seventh century Cork were capable of. This survives because it seems to have been lost- it was probably part of the regalia of some important person who could afford such luxury- perhaps the local king inspecting his newly constructed ringfort. Unfortunately, no other artefact produced by Cork's seventh century goldsmiths has survived but a little bird tells us what we are missing.



The Tullylease Cross-slab. © National Monuments Service.

We do have a finished artefact from a later period- the early 12th century- in St Lachtine's Arm. The arm is a *reliquary*, a specially constructed housing for a relic. It is in the shape of a right forearm with the fingers bent over the palm and held in a half-fist[8]. The style of its decoration is *Hiberno-Urnes*, a mixture of Scandinavian and Irish styles that is the signature decoration on some of the finest Irish artwork of the period. The arm was kept by the Ó Hely family who were the hereditary keepers (*coarbs*) of the ancient ecclesiastical centre at Donoughmore. The coarb was a hereditary position going back to the 7th century as the successor of a monastery's founding saint. By late medieval times this was a lay position, the holder both a landowner in terms of church lands but also a guardian of its religious possessions and responsible for the upkeep of the parish church. This custodian role came to an end with the Reformation when all church land and possessions came into the hands of the Established Church (Church of Ireland). Thus, the reliquary kept for so long by the Ó Helys as coarbs of Donoughmore passed into the possession of the Anglican Bishop of Cloyne.

Cloyne Cross. © National Museum of Ireland.

However, it passed into private hands in the 17th century and eventually into the collection of the National Museum of Ireland where it is displayed as one of the great Treasures of Ireland[9]. Of much the same style and date is the much-less well-known *Cloyne Cross*, also in the collection of the National Museum of Ireland. This was found in the Chapter house of the medieval cathedral at Cloyne. These artefacts show workmanship in bronze, gold and silver that is the products of a skilled and creative workshop somewhere in 11th/12th century Cork.

We can see the increase in population in the number of enclosed settlements that appear from the 6th century throughout the Cork landscape. These *ringforts* survive in numbers across the County[10]. They consist of a circular or oval area enclosed by one or more earthen or stone banks with outer fosses or ditches. The fosse or ditch had a duel purpose as it provided the material for the inner bank and added to the site's defences. Some ringforts have two or three enclosing banks which are considered of higher status. The farmstead would have contained wooden houses, outbuildings and associated farmyard features, the remains of which have long since disappeared and now remain as subsurface archaeology within the enclosure. Ringforts are often known locally as *fairy forts* - a tradition that has preserved many from destruction though a number were levelled by machine in the agricultural boom that followed E.E.C. membership; all are now protected by Law under the National Monuments Acts.

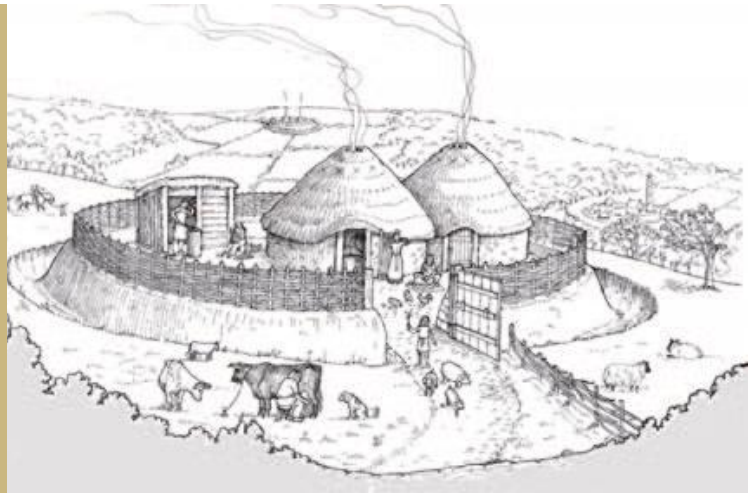
The world of ringforts opened up with Ó Ríordáin's excavation at Garranes ringfort in 1937, which marks the start of modern archaeology in Cork. The discovery of sherds of pottery was a surprise - very little pottery had been made in Ireland since the Late Bronze Age. When it turned out that these sherds were the remains of amphorae made in the eastern Mediterranean area in the 5th and 6th centuries, a new light was cast on Early Christian Ireland. Garranes also produced evidence that inside the ringfort were metal and glass craft workshops using sophisticated techniques for that time. Here was a society not alone importing Syrian wine for their feasts and olive oil for their stone lamps, but absorbing from the late Roman world new skills in the production of precious metals and exotic glass like millefiori and enamel.

Garranes was a high-status royal enclosure enclosed by three earthen banks and ditches, but most ringforts had a single bank and ditch and were just defended farmsteads where people lived and worked, without the luxuries being consumed and produced at Garranes.

As well as the excavations by Ó Ríordáin and O'Kelly already mentioned, more recently Michael Monk, U.C.C., excavated two ringforts at Lisleagh, near Kilworth in North Cork[11] and other important excavations include Lisduggan North[12], Cahirvagliair[13], Raheens[14] and Lisnagun[15].

Another sign of a growing population and greater prosperity is an increase in agricultural output. Irish agriculture was mainly pastoral concentrating mainly on stock rearing, especially cattle[16]. There is direct evidence for agriculture from archaeological excavations, like animal bones and plant remains. The animal bones are, as expected, mostly cattle, pig, goats and sheep[17] whilst the cereals show a predominance of oats and barley with smaller amounts of wheat and rye[18]. Because of the dampness of the Irish climate corn had to be dried before it was ready to be ground. Numerous corn drying kilns in Cork have been discovered and excavated, for example thirteen were excavated in advance of T.I.I. road schemes in County

Artists impression of a ringfort as a defended farmstead of the Early Christian period. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.



Cork[19]. Charred cereal grains from these kilns provide a valuable insight into the agricultural economy of Cork in the Early Medieval period.

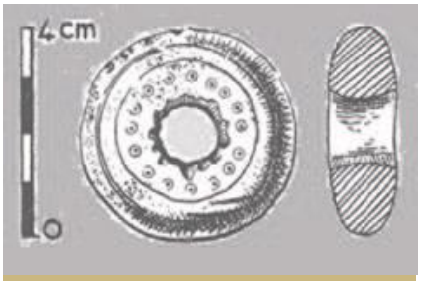
Increased agricultural production is also evidenced by a number of water mills. These, like ogham stones, are properly *monuments*, as part of the landscape, but because their timbers are usually removed during excavation for conservation and later, storage in a museum, they become part of the artefact collection. County Cork has one of the largest concentrations of watermills not only in Ireland but in all of Europe in the period from the 7th to the 10th centuries[20]. We know this because these were built using large oak timbers and where a site has been waterlogged since the mill was abandoned, these timbers will preserve in those conditions. These timbers can be dated by dendrochronology - the science of dating a piece of oak by matching its tree ring pattern with a master chronology. By this method water mills in Cork have been dated from 630 AD up to 1150 AD. Whereas a hand-turned rotary quern (see Chapter 10) can supply a household with ground corn, to feed a much larger social group you need advanced grinding technology as in these horizontal water mills. Milling was so important in the 7th century that a special law tract was written to deal with its regulation- *Coibnes Uisci Thairidne* (kingship of conducted water)[21].

Most artefacts from the Early Christian period excavations are of a humble nature, many just the discards from domestic craft production or things so commonplace they were easily lost or thrown away. Perhaps the humblest of all these is the spindle whorl but one with a large story to tell. The spindle whorl is an indicator of two important aspects of life in Early Christian times- the production of cloth and the role of women in society. These are two things that are often very difficult to find in the archaeological record - cloth because it disintegrates so easily in the ground and women because so many of the artefacts from the period were typically produced by or relate to activities carried out by men. Judging by the number of whorls found at some sites - Garryduff produced twenty-seven - the spinning of wool was an active part of life in Early Christian Cork. Wool may also have been important in terms of exports from Ireland

Reconstructed drawing of a Horizontal mill based on archaeological excavations at Eli Lilly, Dunderrow. Drawing by Uto Hegerzeil, courtesy of Eli Lilly.

at the time; something had to be going in the opposite direction to the incoming wine and olive oil.

On the rare side sometimes turf cutters find very unusual things in bogs. An example of this is deer traps. Three of these from Cork are now in the collection of the National Museum of Ireland. They were found in bogs in Ballynagree near Aghinagh, Derreenacrinnig near Kealkil, and Milford, North Cork. Red deer is the only native species and must have been plentiful in Early Christian times. The early Irish law tracts indicate that some deer were kept for their milk, like cows[22]. Could these traps have been a way of catching deer in order to keep them as farmed animals?



Spindle whorl from the excavation at Garryduff.

Sketch of four of the silver rings from Castlelohert Demesne by antiquarian John Windele.

The Vikings had a major impact on Ireland, firstly as raiders and then as settlers. The first raids on Ireland took place in the period from the 790s A.D. to 830s A.D. and were focused on the rich monasteries like Saint Finbarr's in Cork. This monastery was first raided by the Vikings in 821, but then again in 839 and 913[23]. The monastery was located on the site now occupied by Saint Finbarr's Cathedral. An indication that the Vikings were trading into the interior of the county is the discovery of a silver hoard in Castlelohert Demesne, Cecilstown, in 1848. Bullion silver, mostly in the form of rings, was the principal exchange medium throughout the Viking world. John Sheehan considers this probable evidence of a trade link between the local *Múscraige Uí Áeda* and the Viking world[24].

By the 11th century the Vikings had established a trading outpost in Cork in the area now known as South Main Street. Archaeological excavations at a number of locations along South Main Street have revealed Viking settlement. Excavations at 40-48 South Main Street identified a series of houses with wattle and daub walls along with numerous artefacts including bone combs, leather shoes, wooden bowels, iron axe, rotary quern and an iron pot, staves for a barrel and a bucket and little toy boat[25].

They also established trading outposts in Kinsale and Youghal. These developed into port towns linked into the wider trading networks of the Viking world and were important for the economic development of the county being the first truly urban centres.

The following selection of artefacts have their own individual story to tell but taken together, they help us reconstruct aspects of what life was like in Early Christian Cork.

Artists impression of a Viking house in Cork based on archaeological evidence. What had survived for archaeologists to find today? Foundations of house; hearth in centre of floor; axe head; net weights; loom weights; rotary quern stones; bone comb; jewellery; the toy boat the child is playing with. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

Artist's impression of the Viking trading settlement in Cork. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

ARTEFACT 39

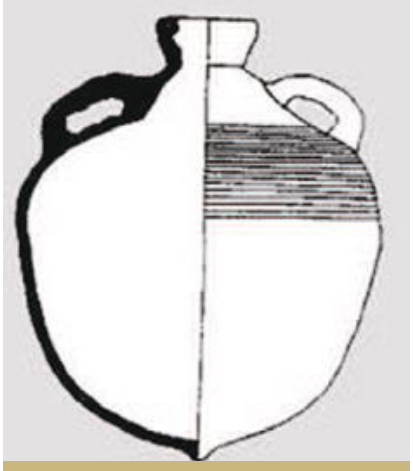
Name: Amphora
Location: Garranes ringfort, Templemartin
Material: Pottery
Date: 5th-7th centuries
Period: Early Christian
Size: Height 50 centimetres;
Width at shoulder 40 centimetres
Collection: Cork Public Museum

The archaeological excavation in 1937 by Prof. Seán P. Ó Ríordáin, U.C.C., of the ringfort at Garranes, Templemartin, was a major event in Cork and Irish archaeology as this was the first time such an enclosure was archaeologically excavated[26]. In the course of the excavation Ó Ríordáin found sherds of a distinctive pottery of a type, that was at that stage unknown in Irish archaeology. At the same time similar pottery was being discovered on excavations in the South-west of England, particularly at Tintagel, a noted royal site on the north coast of Cornwall. Research showed that this was a late Roman pottery, a form of amphorae, and dated to the 5th-7th century. Thus, Ó Ríordáin had, for the first time, conclusive dating evidence for the occupation of a ringfort.

There are two types of amphorae found in Ireland, referred as Bi and Bii. The Bii amphorae are tall and slim compared with the more rotund and shorter Bi examples. These vessels have narrow necks and were used to import wine and olive oil; amphorae in England have been found with tight stoppers to seal the neck. The oil was used in cresset lamps where a wick, partially immersed in the oil, was lit for its light. Cressets are made of stone with a dished top to hold the oil. An example from Labbamolaga monastic site, near Mitchelstown is 25 centimetres high and has a maximum width of 16 centimetres. It was known as Saint Fanchan's Candlestick[27].

The distinctive feature of Bi amphorae is the horizontal grooving applied to the upper body of

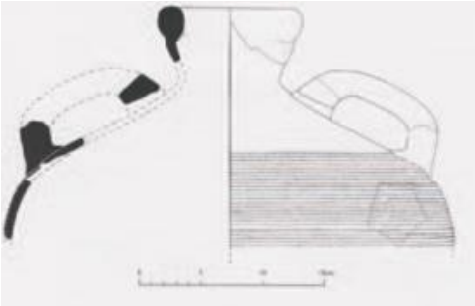
Sherds of Bi Amphorae from Garranes excavation, with typical comb-grooving on some of the sherds. Image courtesy of Cork Public Museum.



Profile of a Bi Amphora of the type represented by the Garranes sherds pictured above.

Cresset lamp from Labbamolaga known as St Fanchan's Candlestick; it is 25 centimetres in height

Bii amphora



Reconstruction of the Bi amphorae from Garranes from which the sherds pictured on the previous page belonged (their position indicated in black on the left).

the pot. These are wheel-turned pots and the decoration was applied by pressing a comb against the surface of the pot whilst turning on the wheel - hence the fine even lines of the grooves. The other distinctive feature is a pair of opposite handles applied to the pot just below its neck. The Garranes amphora survived as sixteen sherds, all from the upper body including rim and handle sherds.

The earliest wheel-turned pottery goes back to Ancient Egypt around 3,000 B.C. and quickly spreads around the Mediterranean and the Middle East. The Romans were phenomenal potters and produced wheel-turned pottery in vast quantities. Amphorae were made specifically for the import and export of wines and olive oils. The pointed and rounded bottoms might seem strange in terms of storage on a ship but there is some evidence that the amphorae were probably stored on racks.

The other main type of imported Roman pottery from this period is E-ware, a coarser undecorated pottery that seems to have been imported as kitchenware in the form of jugs, pots and bowls. All these pots were imported into a country where pottery hadn't been made or used in any quantity since the Late Bronze Age.

This type of pottery was made in the eastern Mediterranean, particularly in Cyprus and Syria. These are both producing wines and olive oil for export in the 5th to 7th centuries. It had first been thought that these amphorae were imported directly from the eastern Mediterranean but recent archaeological excavations in Portugal, Galicia and Western France have produced sherds of this type of pottery and it now seems much more likely that the amphorae were coming into ports in these regions firstly and then being traded on further into England and Ireland. The distribution of amphorae finds from excavations in Britain and Ireland indicates that Cornwall, and particularly the important site at Tintagel on its northern coast, were the staging posts for this trade between Ireland and ports along the Atlantic seaboard of Iberia and France.

Ireland did not have any trading ports at this stage, the nearest thing to trading centres were the larger monastic sites. Goods were probably being loaded and unloaded from boats directly onto land and probably at points along the estuaries and river systems. We can see from the woodwork in the horizontal mills that carpenters at this time were well capable of constructing a wooden jetty but none of these have yet been found.

Though Ireland never came directly under the influence of the Roman Empire this pottery demonstrates extensive trade links with the late Roman world. This gives a routeway along which literacy and Christianity, as well as knowledge of new crafts, art styles and technologies, were able to reach Ireland from the 5th century onwards. These influences completely change the country from an impoverished inward-looking Iron Age to a booming vibrant Early Christian world. And much of that story revealed by just a few sherds of a broken pot.

Distribution of amphorae from excavations in Britain and Ireland.

ARTEFACT 40

Name: Ogham Stone
Location: Liscahane
Material: Stone
Date: 5th-7th century
Period: Early Christian
Size: Height: 1.90m; Width 0.40m
Collection: Millstreet Museum

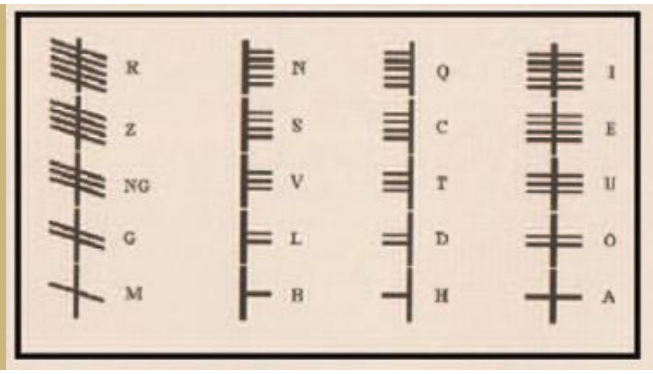
This ogham stone in Millstreet Museum is one of two discovered in 1981 when a souterrain was uncovered during quarrying in the townland of Liscahane near Millstreet. The site was subsequently archaeologically excavated by Dr. Barra Ó Donnabháin, U.C.C. and the two stones, which acted as lintels in the souterrain were removed, one is this example which resides today in Millstreet Museum while the other is in Millstreet Community School. The stone in the museum is 1.90 meters in height, 0.4 meters in width and has a thickness of 0 .15 meters.

'Colmann' Ogham stone from souterrain in Liscahane, now on display in Millstreet Museum. Image courtesy of Seán Radley.

The earliest form of the written word in Ireland is in ogham script, an intriguing and rather mysterious form of writing in which letters of the alphabet are represented by scores and notches cut along the edge of a stone. The inscription is read from the bottom upwards and if necessary across the top of the stone and down the other side.

The language of the earliest inscriptions is "*Late Primitive Irish* (fourth-fifth centuries) to *Early Old Irish* (seventh century)" and the script had "gone out of fashion at the dawn of *Old Irish* (eight-ninth century)[28]". Whether the earliest inscriptions were cut by pagan or Christian scribes is debated but ogham is certainly being used into the Christian period though none of the inscriptions is overtly Christian in character.

Ogham script.



The inscriptions follow a set formula, a person's name, always a male, in the genitive case (as in this is the stone of ...). Sometimes there is just a name but the more usual form is X MAQQI Y (X the son of Y); MAQQI is the ancient form of what will eventually become Mac. Sometimes the inscription is extended as X MAQQI Y MUCOI Z (X son of Y of the tribe Z). None of the people named in these inscriptions are known from any other source.

The inscription on the stone in the Millstreet Museum reads as follows: COLMANN MACI COMGGANN. The inscription on the stone in the Community School reads: CROCCAN MAQI DOMONIGART.

Ogham stones drew attention in the 19th century when it was realised that many were re-used as lintels in souterrains (underground refuges), like these two examples. Why *ogham stones* were re-used in this way is a mystery but they have been found in 18 souterrains in County Cork from which many were dug-out and put on display. The most impressive example of this is the display of ogham stones in the Stone Corridor in University College Cork.

Ogham Stones on display in the Stone Corridor, U.C.C.

Ireland has some 330 ogham stones of which 260 occur in counties Cork, Kerry and Waterford. The densest concentration is on the Iveragh Peninsula in Kerry. The densest concentration in Cork is in the upper Lee Valley around the Macroom area. Some ogham stones still stand as archaeological monuments where they were probably first erected, like the example in Greenhills, Mallow[29]. Outside of Ireland, ogham stones are found in Wales (40 stones), the South-West of England (7 stones) and on the Isle of Man (5 stones). As these inscriptions are in Irish and are Irish names we can assume they represent settlements in these areas of Irish people from at least the fourth/fifth century.

Of the 101 ogham stones listed for County Cork in the *Archaeological Inventory of County Cork*, 27 are on display in the Stone Corridor, U.C.C. (the largest display of ogham in the country); 18 are in the collection of the *National Museum of Ireland*, 5 are in the *British Museum*, 2 in the *Pitt-Rivers Museum* in Oxford, and one each in *Cork Public Museum* and *Balliferiter Museum* in Kerry, plus the pair in Millstreet. Another 20 are now either lost, broken-up or re-buried where found. As well as the example in Greenhills and a companion erected nearby, other ogham stones that can be visited in County Cork include 2 in Aghabullogue graveyard and another nearby at St Olan's holy well; there is one in the grounds of Bartlemy National School, and the tallest in the county stands in the townland of Faunkill-and-the-Woods near Ardgroom on the Beara Peninsula.

The idea of erecting a stone in somebody's memory was well known in Roman times and it is here that the origin of these stones might lie. The inscriptions are never more than just a person's name in the genitive case. So the stone is saying "(this is the stone of) NAME". Some of the names of these stones suggest that the person being commemorated was a pagan but the practice did not cease when Christianity became dominant so that relationship is difficult to untangle; according to Moore it is possible that "these inscriptions commemorated Christians as well as pagans ... but there is very little evidence available to demonstrate this[30]."

The two Liscahane ogham stones represent the introduction of literacy into Cork sometime around the 5th century AD; a legacy that is one of the characteristic features of the county from then onwards. They are also an invaluable source regarding the origin of the Irish language and much debated in this respect by scholars.

Ogham stone from Liscahane souterrain now in Millstreet Community School.

ARTEFACT 41

Name: Cross-inscribed stone
Location: Bawnatemple, Canovee
Material: Old Red sandstone
Date: 650-700 A.D.
Period: Early Christian
Size: Height 42 centimetres; Width 26.5 centimetres; Thickness 14.5 centimetres
Collection: Canovee School

Cross-inscribed stone from Bawnatemple, Canovee. Image courtesy of Theresa Mathers, Carrigadrohid Killinardrish TidyTowns.

Aerial photograph shows Bawnatemple graveyard inside the large circular enclosure representing the ancient monastery of Cannaway. Image courtesy of Theresa Mathers, Carrigadrohid Killinardrish TidyTowns.

This little stone came to light in the 1970s when it turned up during ploughing in a field beside the old graveyard of Bawnatemple, which lies within the large circular enclosure of the old monastic centre of Cannaway (Canovee).

In their examination of the stone O'Flaherty and Hurley decided the carving was done with a hard point rather than a chisel[31]. The circle was inscribed first but is not complete, the lower part never cut. Inside the circle are four heart-shaped depressions forming the cross. O'Flaherty and Hurley weren't sure if the cross was made by the four depressions or if these were cut in false-relief to make a Maltese cross - in either case they call it a *cross-of-arcs*. Only the face, sides and top of the stone are shaped - the back and base are rough.

This stone belongs to a wide and varied type of carved stone known as *cross slabs*. Once Christianity was established in Ireland, sculptors began to carve stones on which a cross was the main form of decoration - around seven hundred *cross slabs* survive at the great monastic site at Clonmacnoise, county Offaly, and other areas, like the Kerry peninsulas, also have large collections of these stones. Nothing on those scales survives for County Cork; the *Archaeological Inventory of County Cork* lists 28 for the whole county, most of them in the South-west. That said, one of the finest examples of a *cross slab* in the whole country is at Tullylease in North Cork which dates to around 750 A.D.

Another fine example of a cross slab is Saint Gobnait's stone in Baile Bhuirne (Ballyvourney). Whilst not decorated in any way as elaborately as the Tullylease stone it is still a very attractive piece of sculpture with a ringed Maltese cross above, which is the figure of a bishop carrying a crozier who is "busily striding forward[32]". This stone is located 19 kilometres west of Bawnatemple, and O'Flaherty and Hurley suggest there may be some connection with the Bawnatemple stone in terms of the Maltese cross element in both. They suggest a date in the 7th century for both stones.

Bawnatemple (Badhun an Teampull- enclosure of the church) is a relatively recent name for the site which in medieval times was Cannaway (*Ceann a'Mhuighe*- head of the plain); the earliest historic reference is in the late 12th century when it is names *Cennmugi* which had become *Kenwy* by the 14th century. The presence of a large circular enclosure around the old graveyard suggests the presence of a vallum or enclosure typical of an early monastic site, later to become a walled graveyard around the parish church[33]. The discovery of this stone is of great importance as it confirms the ecclesiastical nature of this site from as early as the 7th century. This is further confirmed by the presence of souterrains, a nearby bullaun stone and holy well.

The stone is now kept in the local National School and is brought to the graveyard when mass is said there on special occasions, something the old monks of *Ceann a'Mhuighe* would certainly have approved.

Drawing of design and inscriptions on the Tullylease Stone. Drawing by Sara Nylund.

Saint Gobnait's stone, Ballyvourney.

ARTEFACT 42

Name: Crucible
Location: Garryduff,
Material: Baked clay
Date: 5th century
Period: Early Christian
Size: Height 4.1 centimetres;
Width 3 centimetres
Collection: Cork Public Museum

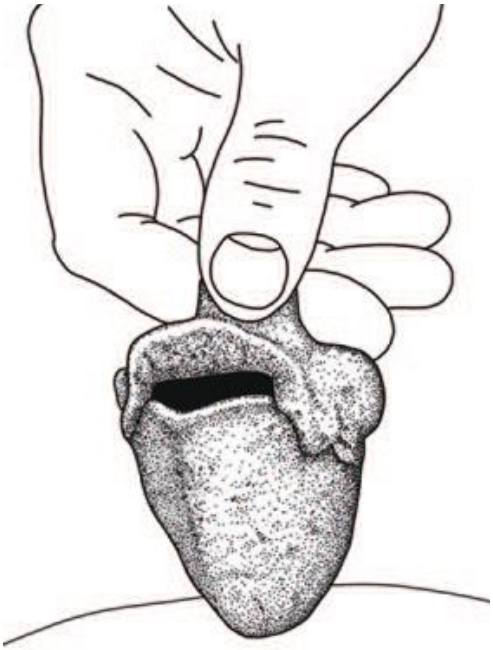
Here we have a small crucible from the archaeological excavations at Garryduff[34] carried out between 1945 and1947, which produced just three complete examples and just twenty four fragments; but the only example with its lid intact from either excavation and the reason it was selected as our exemplar. Early Christian crucibles are small vessels of hard-baked clay. The typical example is pot shaped with a triangular opening, one point of the triangle more pointed as the pouring spout. Some, like our example, had lids with a short handle. Scientific analysis of the residue on the Garranes crucibles using X-Ray Fluorescence (XRF) has produced results indicating what exactly the crucibles were used for[35]. Residues of copper and tin suggest they played a role in the alloying of these to make bronze. Traces of lead and gold show they were used for melting these metals. The crucibles also played a role in glassmaking, particularly with enamel glass.

Crucibles had to be able to withstand intense heat and need to be easily manipulated, as bronze must, to be poured into the mould very quickly once removed from the fire. Some crucibles, like our example, had a covering lid to keep the molten metal from cooling too quickly.

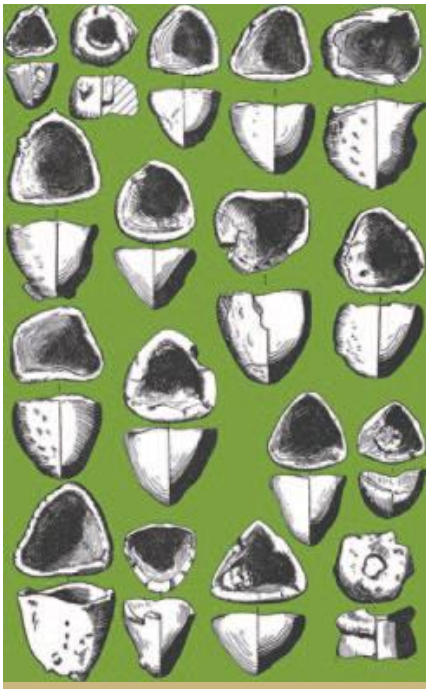
It was not until Prof. Seán P. Ó Ríordáin's archaeological excavation of the ringfort at Garranes, Templemartin, in 1937[36] that the extent of metalworking and glass-working taking place in secular sites was known. The reason for this is, because so many of the metal artefacts from the period are of a religious nature, like chalices, it was assumed these were all made at monastic sites. The evidence from Garranes changed that perception. Here was metal and glass craftwork on an impressive scale judging by some two and a half thousand fragments of clay crucibles found during the excavation. Nothing on that scale of crucibles had been found anywhere in Ireland before then or has since. These crucibles are easily made from a cheap material (pinched into shape from a lump of clay) and were subject to intense heat when used but to have so many discarded fragments implies production on an impressive scale at Garranes.

The excavation at Garranes produced two iron pincers that were probably used to grip a crucible whilst heating its contents and then pouring into the mould. Because they are made of iron they are both corroded but are still discernible as pincers. The longer one is just over 30 centimetres long and the smaller one 20 centimetres.

The ringfort at Garranes has long been regarded as a royal site for two main reasons. Firstly



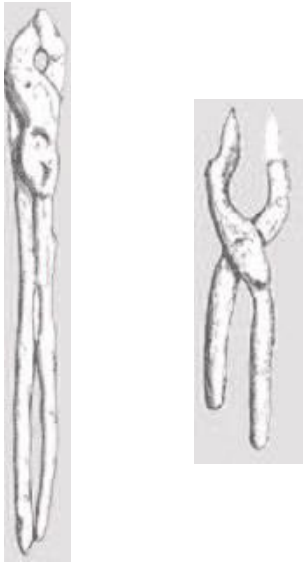
Drawing of Garryduff crucible with its lid. Drawing by Elaine Lynch.



Selection of crucibles from Garranes ringfort.

because it is trivallate (it has three rings of banks enclosing the interior) - the number of banks indicating the status of its owner - and secondly, its identification with *Ráith Raithleann*, the royal seat of the *Uí Eachach Mumhan* - a branch of the wider Éoganacht federation of tribes who controlled the high-kinship of Munster in the early Christian period[37]. High quality metalwork artefacts would not only be important to emphasise one's status but economic prosperity in trading and also gift-giving, which was another important indicator of status. Suffice to say, the craftsmen working at Garranes were a busy and important part of its royal identity.

The crucibles discovered at the Garryduff[38] excavation provides evidence for fine metal and glass working. The crucibles indicate that Garryduff was a high-status ringfort but not on the scale of a royal site like Garranes.



Garranes iron pincers, probably used to hold crucibles (longer one 30 centimetres long, shorter one 20 centimetres long).

Behind the great art works of Early Christian Ireland are these simple clay artefacts. Their simplicity betrays the complexity and precision of the enterprise they were part of - the smelting and moulding of metal and the manipulation of enamel glass to make artefacts varying from simple pins to great artworks. This is exquisitely demonstrated by the *Garryduff bird* which we will examine. It was also discovered during the archaeological excavations at Garryduff.

Artist impression of Early Christian metal workshop showing bronze being poured from a crucible into a bivalve mould. Drawing by Rhoda Cronin.

ARTEFACT 43

Name: Brazing shroud fragments used to make a bell
Location: Gortnahown, Mitchelstown
Material: Clay
Date: 7th century A.D.
Period: Early Christian
Collection: National Museum of Ireland

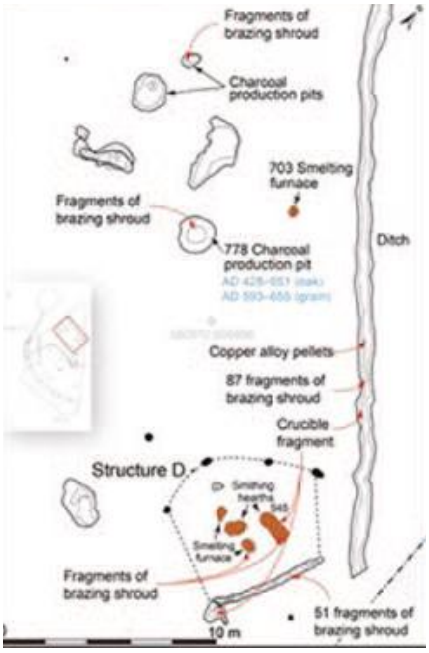
Have you ever been scalded by hot metal? Hopefully not but if you have then you are sure to feel sympathy for the highly specialised metal workers who sweated and toiled in a D-shaped, lean-to workshop at Gortnahown in the 7th century A.D. This site was archaeologically excavated during works in advance of the M8 motorway by Transport Infrastructure Ireland[39].

Within the shelter the remains of two smelting furnaces and two smithing hearths were found. In the immediate vicinity was further evidence of metalworking in the form of iron (smithing and smelting) slag; stone crucibles, copper alloy pellets and a very large concentration of clay brazing shroud fragments (166 fragments, weighing 4.8 kg), as well as some pits used for charcoal production.

Views of a fragment of clay brazing shroud excavated at a 7th century iron-working site at Gortnahown, south of Mitchelstown. Note impression of fabric used in the brazing process in which copper was fused to iron to make small animal bells. Photo by John Sunderland, image provided courtesy of T.I.I.

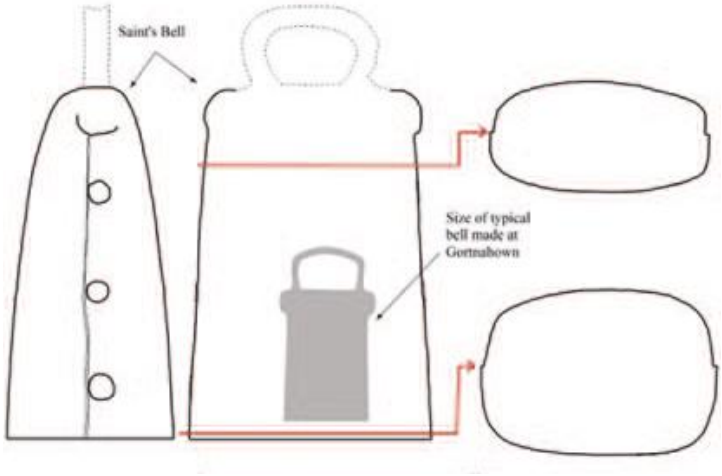
A specialist examination suggests that most of the artefacts being brazed at Gortnahown were small bells of a size similar to modern goat bells. But some fragments may be from larger bells of the type manufactured for use at early monastic sites. According to Paul MacCotter such *saint's bells* were hand-bells and served a variety of uses from objects of veneration if associated with a founding saint, to collecting ecclesiastical revenue, administering oaths, curing disease in both animals and humans, and calling monks and nuns to communal activities[40]. On a more sinister note, Saint Columcille cursed the high-king, Conall, by ringing his bell at the king.

The brazing process carried out at Gortnahown involved the coating of an object (principally made of iron) with thin copper-alloy sheets, then sealing it with clay (the 'brazing shroud') before firing at high temperatures. Following firing, the baked brazing shroud is removed to reveal the fused, copper-coated object. Some of the Gortnahown brazing shroud fragments had fabric impression on them indicating that the 7th century iron-workers first wrapped the iron bells in fabric before applying the clay brazing shroud.

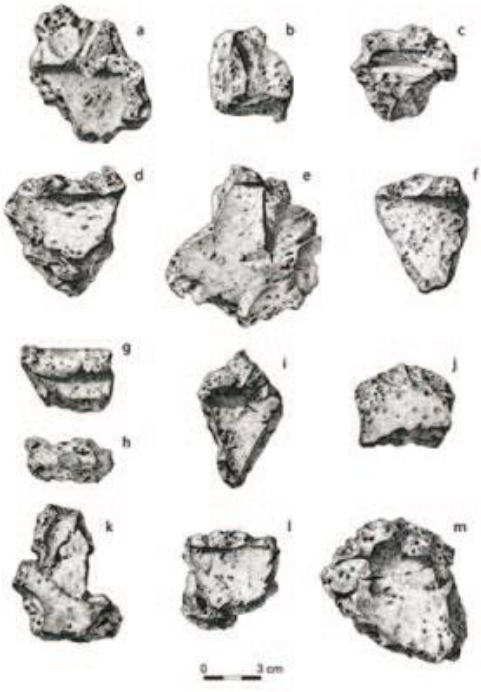


Plan of excavated features at Gortnahown. The D-shaped metalworker's shelter is marked as 'Structure D'.

As to what happened to the forge at Gornahown we don't know but MacCotter suggests the possibility that the operation at Gortnahown either transferred to, or was superseded by, the settlement of smiths established at Brigown (Brí Gobhann–'hill of smith'), founded less than 3 km from Gortnahown in the 7th century. But, for whatever reason, the hammering, hissing and smoke emanating from the Gortnahown forge did eventually stop and was forgotten until these few surviving fragments of clay brazing shrouds were discovered by archaeologists some thirteen and a half centuries later.



A broad comparison between an early medieval animal bell of the type manufactured at Gortnahown, near Mitchelstiown, and an example of an ecclesiastical saint's bell. Illustration from Young 2011 courtesy of T.I.I.



Group of brazing shroud fragments showing detail of shape of bells from Gortnahown, as identified by specialist examination: (a) top, handle and possible horned shoulder, (b) handle and top of flap, (d-e) side and part of handle, (f-g) base, (h) handle and part of shoulder, (i) shoulder, (j-k) base, (l) rim/side and (m) top with part of shoulder and handle. Illustrations by Malgozata Kryczka, courtesy of T.I.I.

ARTEFACT 44

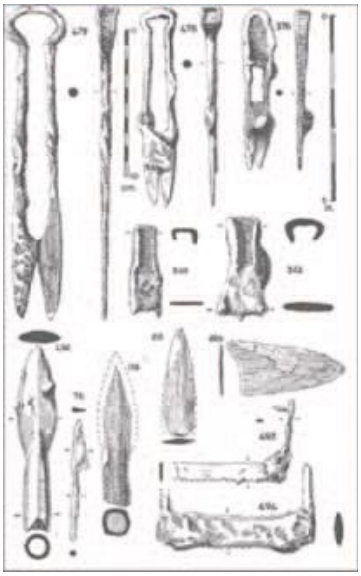
Name: The Garryduff Bird
Location: Garryduff ringfort, Clonmult
Material: Gold
Date: 7th/8th century
Period: Early Christian
Size: Length 1.2 centimetres
Collection: Cork Public Museum

In 1945 Michael O'Kelly began the excavation of two ringforts in the townland of Garryduff, located in East Cork between Clonmult and Ballynoe. One of these produced no evidence of human activity but the other was certainly lived in with the remains of two sub-rectangular houses discovered in the interior. This must also have been a high-status ringfort as it produced evidence of extensive craft production, with an extensive range of bronze and iron artefacts, as well as crucibles and other remains of bronze and iron smelting. But the most remarkable find during the excavation was a tiny gold artefact, the *Garryduff Bird*. This is a very small object made of gold foil, just 1.2 centimetres long. According to O'Kelly the finesse of the work "makes one marvel all the more at the high level of technical skill shown by the craftsman who executed the work.[41]"

It is ingeniously made by manipulating a thin foil of gold to resemble a bird's body, regarded by O'Kelly as the depiction of a wren. The foil is beaten up to form a rounded body but a strip around the edge is left flat. Here are also three projections of the foil on the rear underside of the bird to represent its legs and/or feathers. A strip of gold was soldered onto the reverse side which O'Kelly regarded as a mechanism for affixing the bird to some form of clothing.

The Garryduff Bird. Image courtesy of Cork Public Museum.

Bronze pins from Garryduff excavation.

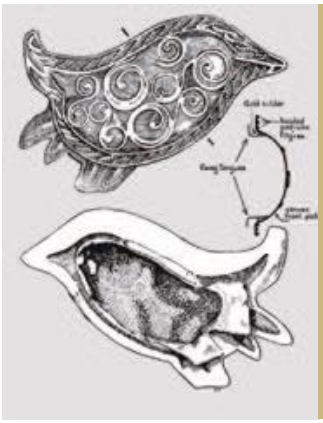


Iron artefacts from Garryduff excavation, including shears (top), axe head (centre), spear tips (bottom left) and part of saws(bottom right).

The bird's outline features are picked out in beaded gold wire that was expertly soldered to the foil, a technique known as filigree work; the solder used was a gold-bronze alloy. The beak of the bird is represented by a straight length of wire. The body of the bird was noted by O'Kelly as a rather awkward space to decorate because it is not a flat surface but curved. It is filled with five S-scrolls of beaded gold wire, one of the curves located to represent the eye of the bird.

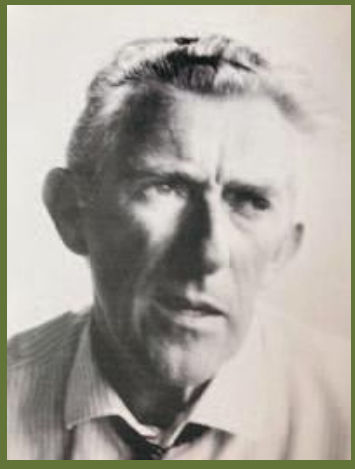
The surface of the bird has been rubbed smooth in places by wear and part of the strip affixed to its under-surface is damaged; O'Kelly considered this wear and tear as happening before the piece was lost. The bird was found near the centre of the ringfort and had "been dropped on and trampled into the ground at or before the beginning of the occupation of the site.[42]" The excavation produced abundant evidence for the production of high grade metal and glass artefacts which suggests that this ringfort was a high-status site where the owner could afford to maintain such skilled craft workshops. Items like the bronze pins found here were both items of prestige when worn on clothing, but also valuable for gift-giving which was an important element in maintaining one's status in society. Could the gold bird have been lost by the local king from his regalia when he had come to inspect the work being done on his new residence?

The bird dates to around 600 A.D. which is also the probable date for the building of the ringfort in which it was found. Its style links it to what craftsmen were producing in Anglo-Saxon, Frankish and Lombardic workshops around this time. The *Garryduff Bird* is proof that Cork had a thriving and flourishing craft industry in metal, producing major works that utilised the best traditions of Irish and European art, in the seventh century.



Edward Fahey's drawing of the front, back section through the Garryduff Bird.

Michael (Brian) J. O'Kelly (1915-1982)



Born in Abbeyfeale, county Limerick, he began his third level education by studying engineering in U.C.C. but changed to archaeology after becoming Seán P. Ó Ríordáin's assistant on the excavation at Garranes in 1937. In 1944 he was instrumental in setting up Cork Public Museum and became its curator until succeeding his mentor Ó Ríordáin as Professor of Archaeology in U.C.C. in 1946. He died in 1982, just months after retiring from that position.

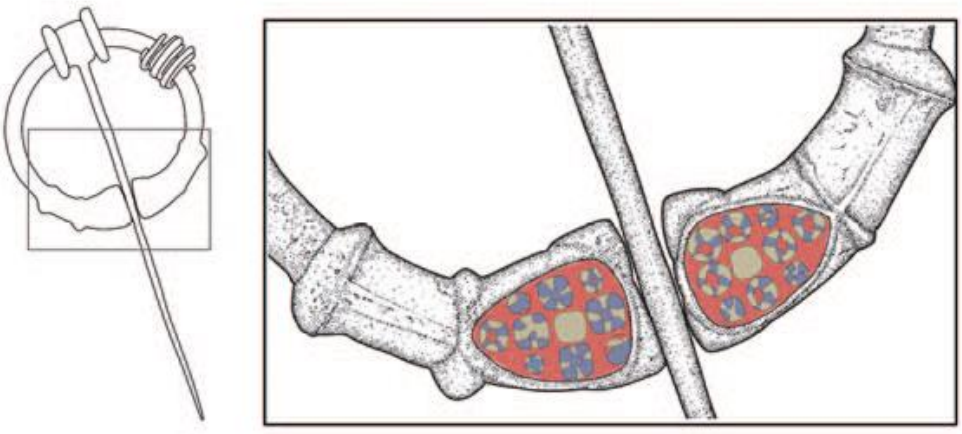
O'Kelly's contribution to Irish archaeology was immense; most notably his excavation of the great passage tomb at Newgrange, county Meath, which he published in 1982. But his work in Cork was important and extensive, starting with his excavation of the two ringforts at Garryduff in 1945-47, but further at the wedge tomb of Island, near Burnfort; the Bronze Age enclosure at Carrigillihy, near Myross, the Bronze Age burial at Moneen, near Glanworth, and the hut site and fulacht fiadh at Baile Bhuirne, as well as many other smaller excavations, notably of Bronze Age burials. The latter excavations are also notable for O'Kelly's pioneering work in experimental archaeology where he reproduced the cooking process of the fulacht fiadh. He was also a keen student of metalwork techniques and published a masterful study of the Cork Horns in 1961.

ARTEFACT 45

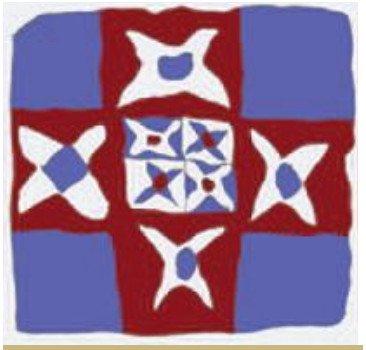
Name: Millefiori piece
Location: Lisnacasheragh, Garranes, Bandon
Material: Millefiori Glass
Date: 5th-7th centuries A.D.
Period: Early Christian
Size: 4 millimetres square; 2 millimetres thick
Collection: National Museum of Ireland

This tiny square piece of coloured glass (4 millimetres square; 2 millimetres thick) is one of three pieces of millefiori found during the archaeological excavation of the ringfort at Garranes, by Prof. Seán P. Ó Ríordáin of U.C.C. in 1937. This was a pioneering excavation in many ways but particularly because until then the age of ringforts was not known. The discovery during the excavation of sherds of a type of Mediterranean pottery dated to the 5th to 7th centuries was the first firm evidence for the date of these monuments. Unfortunately for Ó Ríordáin the interior of the enclosure, as is the case with so many ringforts, had been used in the 19th century for potato cultivation. This made understanding the archaeology difficult because so much had been dug-up to make lazy beds. He excavated about half of the interior of the enclosure and discovered a great deal of evidence for craftwork, chiefly metalworking but also working with millefiori glass.

Millefiori glass is made by combining rods of coloured glass to create patterns of fused glass.



Ballinderry Brooch with sections of millefiori set in red enamel at head of pin and terminals of the brooch (outlined in orange boxes). Drawing by Elaine Lynch.



Reconstruction of colour scheme in millefiori piece from Garranes.

Modern piece of millefiori glass.

These fused rods with the different colour combinations can then be combined with other rods to produce a more complex pattern until the desired effect is achieved. These rods can then be chopped into small sections to make small panels for inlay into jewellery or as glass beads. Millefiori was invented in Mesopotamia as far back as 1,500 B.C. and became very popular with the Romans. It comes into Ireland along the same routes of trade and influence that brought so much else into Ireland from the late Roman world from the 5th century A.D.

Judith Carroll has identified some 110 metal artefacts from Early Christian Ireland with millefiori decoration - it is always used in metalwork, which is nearly always bronze[43]. In the earlier examples the millefiori pieces are set into red enamel in a rather hap-hazard manner, each piece separate from the other; enamel is molten glass poured into a shaped recess and fuses with the metal before cooling - the millefiori is pressed into the glass before it hardens. At this early stage - 5th/6th century - the glass is being imported, probably along the same trade routes that are bringing in amphorae. An example of Carroll's early style is the Ballinderry Brooch. Here the head of the pin and the ring terminals have a red enamel setting in which sections of millefiori have been set in a rough pattern. The Ballinderry Brooch shows how the Garranes piece of millefiori would have been fitted into a bronze piece like this ring pin.

Though tiny in size and having lost its lustre after so many hundreds of years in the ground, the tiny piece of millefiori from the Garranes excavation links Ireland with the wider late Roman world at a time of great change in the Early Christian period. It shows craftsmen working in a ringfort in Mid Cork around 600 A.D. were adopting new and exciting decorative techniques.

By 800 A.D. these techniques were being refined to produce a distinctly Irish form of millefiori. This is evident on the millefiori used to decorate such masterpieces of European art as the Tara Brooch and the Derrynaflan Patten.

Millefiori was revived in Venice in the nineteenth century where it is called *Murano*, and this is still the centre of production for this colourful decorative glass in Europe.

Seán P. Ó Ríordáin (1905-1957)

Ó Ríordáin was from Monkstown, county Cork, and began his professional life as a primary school teacher before switching to archaeology in 1931 when awarded a travelling scholarship by the National University of Ireland. He worked briefly in the National Museum of Ireland before his appointment as Professor of Archaeology in U.C.C. in 1936. He remained in that position until 1943 when appointed Professor of Celtic Archaeology in U.C.D. - a position he held until his untimely death in 1957, at the age of 52. Ó Ríordáin was a pioneer of modern techniques in field archaeology in Ireland, notably demonstrated by his excavation at Garranes ringfort in 1937. He published widely on Irish archaeology and his general introduction to the subject, *Antiquities of the Irish Countryside*, first published in 1942 and still in print, is a valuable resource to anyone interested in the subject.

ARTEFACT 46

Name: Bullaun Stone
Location: Aghacross, Kildorrery
Material: Stone
Date: 7th-12th century A.D.
Period: Early Christian
Size: Length 0.6 metres; Width 0.45 metres; central depression diameter 0.23 meters, depth 0.06 metres

Aghacross bullaun stone.

Bullaun stone (circled) inside north-east corner of medieval church at Aghacross.

The Gaelic word *bullán* means a bowl; a small pool or a round hollow in a stone. It is this latter meaning that best describes the stones that occur at many early ecclesiastical sites that are termed *bullaun stones*; some 100 examples are on record for County Cork. These stones have a circular bowl-shaped depression carved onto the surface. There can be more than one depression but one is the norm in Cork. This example is from Aghacross, Kildorrery, and is located just inside the north-east corner of the medieval church. It was found buried in a pile of rubble during consolidation works at the church by Cork County Council in the 1990s[44]. Aghacross (*Áth Chros*) is associated with Saint Molaga (*Mo Laca*) and was a chief church of the *Uí Chuscraid* branch of the *Fir Maige* in the 7th century[45]. Another bullaun stone occurs at nearby Labbamolaga, the other important church of Saint Molaga[46].

Their exact purpose remains a matter of debate but many have the same function in tradition as holy wells in that the water collected in the hollow was considered to have curative powers. An example of this tradition is the "wart well" in Timoleague Friary. There is also a tradition that a round stone placed in the hollow and turned granted a favour or a curse as wished for. Some 100 bullaun stones have been recorded in the county; most are associated with early monastic sites like Aghacross, Tullylease, Templebryan and Labbamolaga. Other theories regarding their use suggest that some functioned as mortars for crushing plants or other materials and are entirely utilitarian in purpose. But the fact that so many are found at or associated with church sites would suggest that most had some form of religious function.

There is a lot of 19th century folklore recorded regaring these stones but Brian Dolan is doubtful about their use for revealing original functions; he points out that "knowledge of the function of bullauns appears to have been lost by the eleventh or twelfth centuries when fanciful stories were already being told about them[47]". In his survey of evidence from archaeological excavation Dolan found "evidence for the use of bullauns in metallurgy in the early medieval period in Ireland. It is not clear that bullauns in Ireland were used in the processing of ores, but there is unambiguous evidence for their association with smithing." This might explain why so many are found at early ecclesiastical sites where metalworking is a well-attested occupation. However, it should be noted that nothing like a bullaun stone was found in the archaeological excavations at Garranes, Ballycatteen and Garryduff, all ringforts with ample evidence for metalworking.

Notwitstanding Dolan's doubts about the antiquity of any of the legends attached to these stones, it may be worth noting that the water collected in the bowl of these stones was believed to have curative powers, like a holy well, and a number are known as wart well indicating its curative power.

These stones are a curious and enigmatic artefact that belong to the early church and remind us that as simple a thing as a stone with a circular depression can be so puzzling and mysterious in today's world.

ARTEFACT 47

Name: Cloyne Cross
Location: Grounds of Cloyne Cathedral
Material: Bronze
Date: mid-12th century
Period: Early Christian
Size: Length: 12.4 centimetres; Width 11.8 centimetres
Collection: National Museum of Ireland

The Cloyne Cross. © National Museum of Ireland.

This bronze cross was discovered by a Mr. Hogan in 1885 in the chapter house of the medieval cathedral in Cloyne; the cathedral stands on the site of the early ecclesiastical monastery founded by Saint Colman. The cross was then donated to the Royal Irish Academy and thence into the collection of the National Museum of Ireland.

The cross is slightly taller than it is wide and is missing the end of one arm which has broken off. Also missing is the centre piece of the cross - a circular setting of twisted silver wire once held a stud or jewel of some kind. Near the end of each arm is a hole and there is another hole bored on the side of one of the arms. Each arm is decorated by a single figure standing to its full length. The figures are near identical but there is some variation, especially in how the clothing is shown. The faces are plain with bulging eyes and downturned mouths. The hair is represented by three bands with a loop at the bottom and a central parting on top and falls to a curl at the shoulder. The body is elongated and covered in some form of flowing garment represented by raised bands cut across at regular intervals to give an effect. Curiously the garment does not come up to the neck but begins to fall at chest level. The arms are long and thin and are bent low down on the body at a right angle, one in front and one behind, and grasp each other. The legs are plain and have out-turned feet. Between the legs, at the bottom of the garment, is a tail-like projection. Each leg has a snake coiled around it with the head on the outside facing down and the tail reaching up to flank the garment as far as where the arm crosses. This is a typical motif of the *Hiberno-Urnes* style of the art in 11th/12th century Ireland, a style showing a strong Viking influence, but in a distinct Irish fashion.

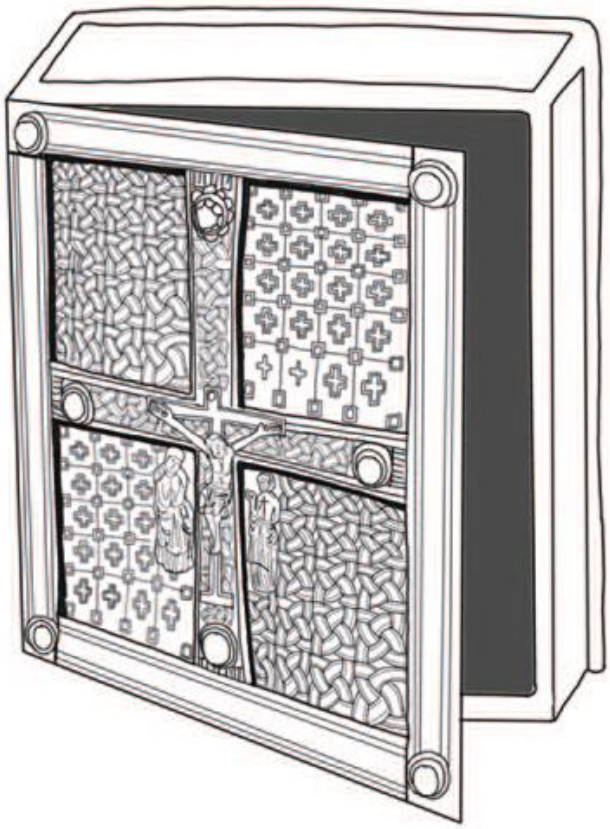
Raghnall Ó Floinn of the National Museum of Ireland suggests the cross may have been "the centre piece of a book shrine - its shape and proportions are very close to the cross on the Book of Dimma[48]". He also notes the similarity between the figures on the Cloyne Cross and those on the Lismore Crozier. These comparisons would date the Cloyne Cross to the mid-12th century.

County Cork is not blessed with a great deal of Early Christian art works, apart from the magnificent St Lachtain's Arm reliquary. The Cloyne Cross is therefore a very important part of

Panel from the Lismore Crozier with figures very similar to those on the Cloyne Cross - same facial features and hair with central parting and same treatment of clothes. © National Museum of Ireland.

the county's Early Christian art. We do not know exactly what its function was or who the four figures on its arm represent, but it is a high-status piece of bronze metalwork and reminds us of the past glories of the county's Christian heritage. If this cross was part of a shrine for a holy book then it is also a memento of Cloyne's importance as an important Early Christian monastic centre and one of its revered relics.

One arm of the Cross- note the snake like creatures coiled around the figure's legs. © National Museum of Ireland.



The Book of Dimma- the cross on the cover is the same size and outline shape as the Cloyne Cross. Drawing by Elaine Lynch.

ARTEFACT 48

Name: Saint Lachtain's Arm
Location: Donoughmore
Material: Gilt bronze over a wooden core
Date: Early 12th century
Period: Early Christian
Size: Height 40 centimetres; Diameter at base 7 centimetres

St Lachtain's Arm. © National Museum of Ireland.

In 1829 a bronze arm was exhibited at the Society of Antiquities in London as an "Egyptian relic." Its true nature was only realised when Thomas Crofton Croker (1798-1854), a native of Cork who was a noted collector and publisher of traditional songs and folklore, made the connection between the bronze arm and a note by Charles Smith in his book *The Ancient and Present State of the County and City of Cork*, published in 1750. Smith made the following comment in his entry for Donoughmore parish: *"The patron saint was named St Lachteen, and some years ago the parish priest kept here a bronze hand as a holy relic, by which the people swore upon all solemn occasions, but the hand was removed by one of the titular Bishops of Cloyne"*. Thus, was recognised the greatest artwork that survives from Early Christian Cork.

The arm had long been in the possession of the Ó Hely family who were the hereditary keepers (coarbs) of the ancient ecclesiastical centre at Donoughmore. They must have become tenants of the Church of Ireland Bishop of Cloyne when the Established Church of Ireland inherited medieval church lands after the Reformation. Somehow, as part of their lease in 1639, the Ó Hely surrendered the arm to the bishop. Unfortunately, any surviving stories and legends associated with it were also lost at this time. Eventually the bronze arm became part of the collection of the National Museum of Ireland where it is on display as one of the Treasures of Ireland and is regarded as one of the finest examples of ecclesiastical metalwork from medieval Ireland.

The arm is a *reliquary*, a specially constructed housing for a relic. It is in the shape of a right forearm with the fingers bent over the palm and held in a half-fist[49]. The arm was constructed in three separate parts. The hand is cast in bronze and is hollow - presumably to house the relic finger bones. The reliquary consists of a hollow wooden core covered by eight bronze plates, four above four, held in place by a central collar and lengthwise by bronze strips. The original circular base, which once housed a large rock crystal, is now separated from the arm.

The surface of the hand is covered with small square and triangular panels, once covered with gold-thread filigree and gold foil, but most of this has been worn off. The fingers have engraved interlace patterns that are also heavily worn down. The fingernails are plain silver plates and there is a triangular silver plaque with interlace patterns on the palm.

Cast bronze hand of St Lachatin's Arm with silver inlay. © National Museum of Ireland.

Arm panels with vertical and horizontal strips of bronze holding them in place.

The main portion of the forearm is covered by eight trapezoidal-shaped, bronze plates, all approximately eleven centimetres in length. These are covered with engraved animal-headed interlaced ribbons of silver.

The base is formed by a circular plate with a large central opening that originally held a rock crystal stud through which the relic could be viewed.

The vertical strips that bind the panels on the arm have four inscriptions in Irish. Parts of these are illegible, as most likely due to having been rubbed smooth by pilgrims. The inscriptions beg the relic to pray for those who patronised the construction of its reliquary - they translate as follows:

For Cormac son of Mac Carthaig the heir to the kingship of Munster...

A prayer for Tadhg son of Mac Carthaig, king...

A prayer for Diannait son of Mac Denise, successor of...

A prayer for Maelsechnaill Ua Cellachain, high king...

The most recognisable of these personages is Cormac Mac Carthaig who, as King of Munster, was responsible for the building of Cormac's Chapel on the Rock of Cashel between 1127 and 1134 A.D. and was an important patron of the church. He is the most likely candidate to have commissioned this exquisite work of art. This inscription confirms the date of the Arm as early 12th century. Paul MacCotter notes that arm-shaped reliquaries "originate in northern Germany around the 1050s and spread to Ireland along with other German influences, such as the Romanesque style used in Cormac's Chapel at Cashel[50]." Very little is known of Saint Lachtain himself, there is no surviving *Life*, but MacCotter believes he may be "an actual saint of Múscraigh (Muskerry)[51]."

The tradition regarding how the arm was venerated is lost but it must have been heavily used judging by its surface, which has been worn smooth over time in places, particularly on the hand. This wear has removed most of the gold leaf that once covered much of its surface as well as most of its finely wrought gold-wire filigree. Rubbing a relic or its reliquary is a long-held tradition in the Irish church whereby physical contact transfers the blessing of the relic to the pilgrim.

The style of the decoration, particularly the animal-headed ribbons of interlace, show *Hiberno-Urnes* influence, a style of decoration that combined Scandinavian and Irish motifs in 11th and 12th century Irish artworks. St Lachtain's Arm is a splendid piece of decorative metalwork in a distinctly Irish style. It is one of the great Treasures of Ireland and the finest piece of artwork Cork produced in the Early Christian period. Though now on display as an archaeological artefact in the National Museum of Ireland we should not forget that in its day the Arm was kept at Donoughmore by the churches' hereditary keepers and revered by the local population for its perceived powers. We don't know what these powers were but can be sure that physical contact with the Arm had a special significance for the people of Donoughmore and surrounding area into the eighteenth century. What must they have felt when the hereditary keepers of the reliquary and the relic bones that it contained, was given to the Protestant Bishop of Cloyne from whence it disappeared shortly afterwards to England?

Reliquaries

The cult of the dead and the belief in the afterlife are a feature of most religions. This is often manifested in the veneration of the remains of a holy person or associated possessions by placing them in a shrine. The veneration of these relics often became so intense that a special container was required to preserve the relics. These are reliquaries and often in themselves are great works of art, worthy of the revered remains they contained. As Christianity became widespread and an established part of the fabric of Irish life from the 7th century, the relics of early Saints became very important. Monasteries became known for the relics they held and pilgrimages to venerate these flocked to these monasteries for the benefit of the relics' spiritual power.

Reliquaries come in all shapes and sizes depending on the form of the relic they contain. Outstanding examples of Irish Art include the Shrine of Saint Patrick's Bell and the Emly House Shrine. The great Cork relic is the Shrine of St Lachtain's Arm, dated by its inscriptions to around 1120 A.D. Arm reliquaries were a new form at that time and its unique form shows Byzantine influences and shows how much in touch the Irish church was with contemporary European influences. The only other surviving arm reliquary is the 15th century Shrine of Saint Patrick's Hand, now in the Ulster Museum, Belfast. The Cloyne Cross may also be part of a reliquary as it compares very closely in form and size with the cross on the Shrine of the Book of Dimma, also 12th century in date, which is associated with the monastery at Roscrea in Co. Tipperary.

Like St Lachtain's Arm, most surviving reliquaries were kept by their hereditary keepers, the *coarbs*, into relatively modern times. Many were then purchased by collectors when these keepers fell on hard times and parted with their treasures for small sums of money. Eventually, when these private collections came up for auction, many reliquaries were purchased by museums and made their way into national collections in Ireland, Britain, America and elsewhere.

ARTEFACT 49

Name: Deer trap
Location: Ballynagree East, Rylane
Material: Wood
Date: 6th/7th century A.D.
Period: Early Christian
Size: Length 0.8 metres; Width 0.15 metres; Depth 0.1 metres
Collection: National Museum of Ireland

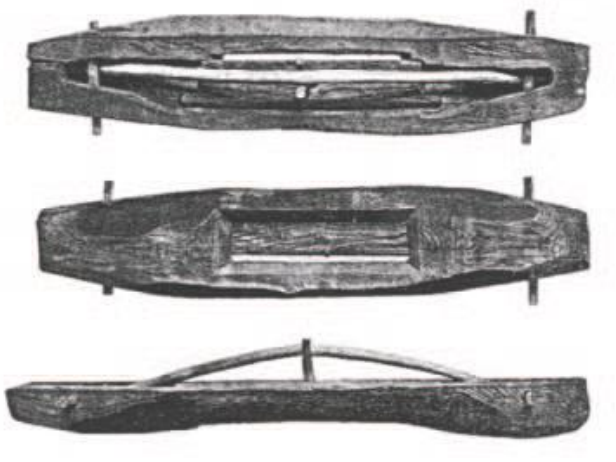
The upper surface of the Ballynagree East trap showing the hinged valve over the opening and the pegs at either end. © National Museum of Ireland.

This intriguing and intricate wooden mechanism was found in 1971 by Daniel Lane when he was cutting turf in Thoghar Bog in Ballinagree East townland[52]. At first Mr. Lane thought the wood was a piece of bog oak but when he lifted it he realised that he had something man-made and promptly contacted the National Museum of Ireland where it was conserved and added to the national collection. The museum has two further examples from County Cork, both also found in bogs, from Derreenacrinnig near Kealkil in West Cork, and Milford in North Cork. Twenty-three other examples have been found in Ireland, and about forty from elsewhere across Northern Europe, nearly all from bogs. But what is it and how was it used?

Deer with its foot in a trap from the Banagher High Cross (the grey areas are where the stone is damaged)

The answer to this question is a panel carved on the high cross from Banagher, Co. Offaly, now in the National Museum of Ireland. This shows a stag deer with something attached to one of its feet. This is a trap that the deer has stepped into and is now firmly attached to its foot. These are heavy wooden traps and would slow a deer down considerably, making it much easier to hunt or even capture.

There are no published descriptions of the three Cork traps and indeed little written about any of the traps found in Ireland. A very similar trap to the Ballynagree East example was found in the Moss of Auquharney, Aberdeenshire, Scotland in 1921 and a description of it and how it worked was published in 1923[53]. These are called tread-traps and essentially there are two types - those with a single valve (the trap-door device) and those with two valves. Single-valve trap is the more common type in Ireland and the two-valve on the Continent. Some twenty-three examples have been found in Ireland, one each in Scotland and Wales and some forty from Scandinavia and North-central Europe.

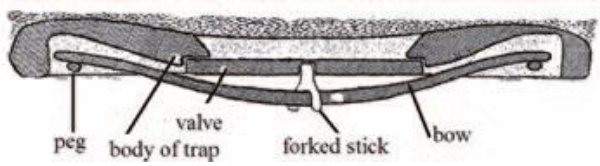


The deer trap from Moss of Auquharney, Scotland.

The traps where the timber has been identified are made from a log of oak or alder. The wood is cut to a roughly rectangular form, much longer than wide (the Auquharney trap is 1.15m long and 0.25m wide). In the centre an opening is cut through the wood to make a rectangular aperture. The opening has a groove cut at opposite corners on the long side to take the hinges on the valve (the trap door) in a way that allows the valve to hinge open or closed but not to fall out. On the underside, a length of willow or some other strong but pliable timber, is held at either end by pegs set into holes bored through the trap. This is held in tension in the middle by a forked stick.

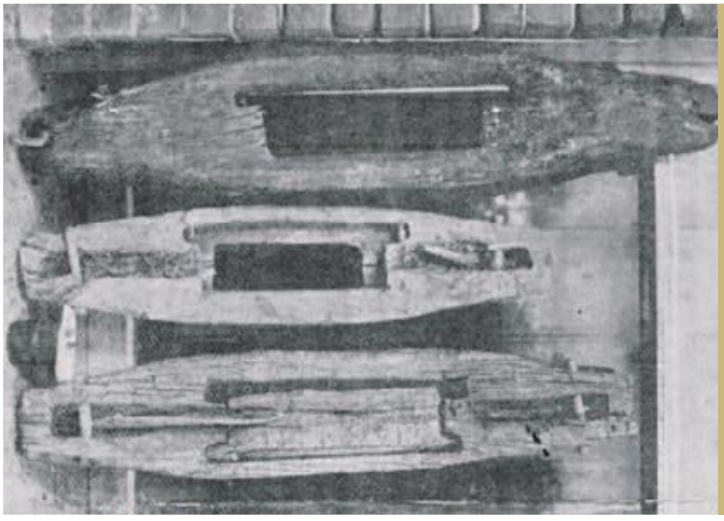
The trap is set over a hole in the ground. The flat side faces upwards and the side with the bow, downwards. When the deer steps on the trap - it will be hidden from view by a covering of leaves, its leg sinks down through the hinged valve into the pit. Owing to the strong action of the spring against the valve the leg cannot be withdrawn. The trap is so heavy and cumbrous no deer could drag it far.

The under surface of the Ballynagree East trap showing the mechanism to hold the valve in place once the animal's leg comes through the valve. The second set of peg holes and the stout nature of the wooden piece that hinges on them shows that, in detail, this trap is different from the Scottish example described below (but we have no published description of how exactly this trap works). © National Museum of Ireland.



Cross section of the Auquharney trap.

Diagram shows deer leg having come through the valve but pressure from the bow against the valve, through the forked stick, prevents the leg from being withdrawn out of the trap.



Three of the Larkhill traps; the largest is 1.25 meters in length. Note that the trap on the right still has its valve in place. The one on the right has its upper side facing the camera, the other two their under-surface.

The Prumpelstown Lower trap: upper side above through which the deer will step - note the two valves and the bone teeth fixed into their edges. Image courtesy of Rubicon Heritage and T.I.I.

A radiocarbon date for the Auquharney trap, which is now in the National Museum of Scotland's collection, is 530-680 A.D. A radiocarbon date for a deer trap from Larkhill lake, county Fermanagh came out around 550 A.D. Thus, a sixth/seventh century A.D. date would seem to be likely for the Ballynagree East trap.

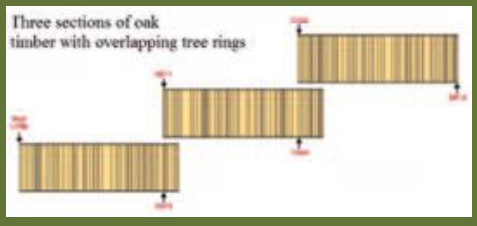
The Larkhill find, made in 1895, is interesting as nine traps were discovered in a rough V-formation set about two feet apart in bogland. If a single trap might seem hit-and-miss in terms of a catch, the arrangement of nine along a known trackway used by deer is much more likely to have a success.

A more recent discovery of a tread-trap was made during archaeological excavations in advance of roadworks in the townland of Prumpelstown Lower, Castledermot, Co. Kildare. This is a smaller version of the traps described above and has two valves. Instead of the bow-tension mechanism described above this is a more brutal trap. Pointed bone teeth on the edge of each valve will grip the animal's foot as it sinks into the trap and then tighten into the leg when the animal tries to withdraw it from the trap.

Apart from the particularly vicious Prumpelstown trap, the rest seem more intent on hobbling the deer than maiming it. The early Irish law tracts indicate that some deer were kept for their milk, like cows[54]. In the saints Lives *"hinds miraculously supply milk in place of a cow, and a stag may likewise miraculously take the place of an ox at the plough*[55]*."* Could these traps have been a way of catching deer to keep them as farmed animals? Perhaps they were just used by hunters. Deer hunting was prevalent in early Christian Ireland and the early law tracts devote much attention to the dos and don'ts of hunting animals, especially deer[56]. Deer bones have been found in several archaeological excavations in a context that suggest venison was part of people's diet though never as popular as beef and pork[57]. Deer were also prized for their hide and their antlers.

Dendrochronology

Oak trees are unique in that the annual width of their tree rings is a regular pattern, wide or narrow depending on weather conditions over the year. By mapping this pattern a master chronology has been constructed for Ireland stretching back to 5289 B.C. Thus, a piece of wood made from oak, if it contains at least 20 consecutive tree rings, can be dated when matched to the master chronology. If the bark is present and there are enough tree rings, the felling date for the tree that piece of timber came from can be calculated to an exact calendar date. Tree rings can also tell much about past climates. This is dramatically demonstrated by the band of narrow rings that resulted from the Heckla 3 volcanic eruption in Iceland in 1159 B.C. (see Chapter 7). In Ireland most of this work is done in the Dendrochronology Laboratory at Queens University Belfast. In Cork, dendrochronology has been used to date timbers from fulacht fiadh troughs (see Chapter 7) and for the timbers used in horizontal water mills (see Artefact 50).



Tree rings on a section through an oak.

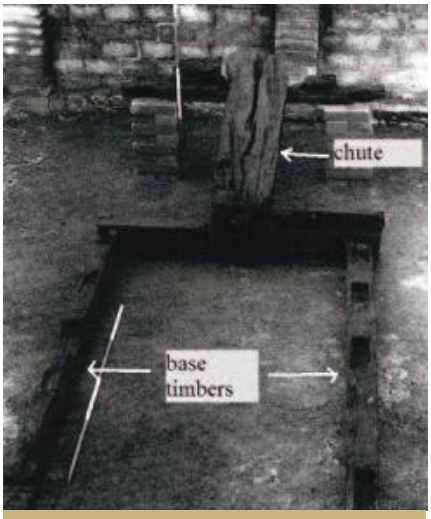
ARTEFACT 50

Name: Horizontal Water Mill Wheel
Location: Cloontycarthy, Cill na Martra
Material: Wood
Date: 9th century A.D.
Period: Early Christian
Size: Length 0.8 metres
Collection: Cork Public Museum

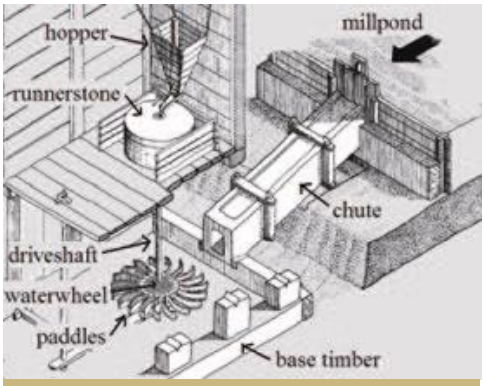
Cloontycarthy's horizontal waterwheel; the paddles were fitted into the notches along the wide base; the upward arm is part of the mill's driveshaft. Image courtesy of Cork Public Museum.

In 1981 during land drainage in the townland of Cloontycarthy, Cill na Martra, the excavating machine pulled some large timbers out of the ground which looked to be man-made rather than natural bog oak. When the find was reported, Dr. Colin Rynne of the Department of Archaeology U.C.C. excavated the area where the timbers had come from and found the remains of a horizontal-wheeled watermill that turned out to be 9th century in date. This amazing discovery brings us right back to the beginnings of industrialisation in Cork and the grinding of corn on a large scale. The oak timbers that formed the structure and main components of the mill had been preserved in the waterlogged ground and provided Dr. Rynne with enough information to reconstruct how this mill looked and how it worked some twelve hundred years ago[58].

The main timbers that survived at Cloontycarthy were the horizontal *waterwheel*, the wooden chute that fed water directly onto the waterwheel, and the *base timbers* that formed the foundation on which the mill-building itself was built. The *runnerstone*, the upmost of the millstones, was also found during the excavation.

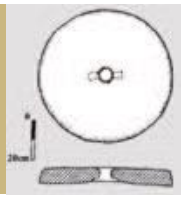


Base timbers and chute reassembled at Department of Archaeology, UCC, in the 1980s.



Reconstruction of Cloontycarthy Horizontal Mill.

Cloontycarthy runnerstone.



Bedstone of horizontal mill from Lisduff, Ardfield: diameter 0.6 meters; diameter of central hole 0.1 metres.

This type of mill is typically located on a fast-flowing stream where water is stored behind a dam in a *mill-pond*. When needed this water is fed into an inclined *chute* that then directs the water onto the *paddles* of the *waterwheel* turning it at speed. A *driveshaft* attached to the *waterwheel* then turns the *runnerstone* (upper stone) of the mill itself and thus grinds the corn fed into it via a *hopper*.

This is a huge advance on the hand-turned rotary quern which up to the time of these mills being introduced into Ireland in the late 5th century had been the most efficient way of grinding corn. A rotary quern is sufficient to the needs of a single household but a mill like the Cloontycarthy example can provide flour, meal and malt for an entire community. In this way the introduction of milling and a growing population go hand-in-hand, the bigger the population the more mills you need and the more mills you have the greater the population you can feed. This certainly seems to have been the case in Cork from the 5th century onwards.

During the Early Christian period County Cork has one of the largest concentrations of watermills, not only in Ireland but in all of Europe. We know this because these were built using large oak timbers and these can be dated by dendrochronology - the science of dating a piece of oak by matching its tree ring pattern with a master chronology. Thus, mills in Cork have been dated from 630 A.D. up to 1150 A.D. The vast majority of these were horizontal-wheeled mills like the Cloontycarthy mill which itself was dendrochronology dated to 833 A.D. The earliest dated mill is a tidal mill found at Little Island in Cork harbour and dendro-dated to 630 A.D. In this case, high tide water was stored in a millpond and used to turn a vertical waterwheel[59].

Tillage was second to dairy in Early Christian Ireland but still, a strong farmer was expected to sow sixteen sacks of grain annually. Corn was grown in small, enclosed fields adjacent to the ringfort. But it was the monasteries that were the most prolific tillage farmers as their diet relied more heavily on grain than did that of the general population[60]. Consequently, horizontal mills were a feature of monastic settlements, located on the nearest suitable water source.

Milling was so important in the 7th century that a special law tract was written to deal with its regulation - *Coibnes Uisci Thairidne* (kingship of conducted water)[61]. Ownership of a mill depended on one's rank in society and only somebody of high rank could own a mill outright, otherwise ownership was shared by those using it. There was a professional class of miller (*muilleóirn*), some of whom had their own mill that could be used by many people.

The Derrynasaggart Mountains might seem today like an unlikely place for a corn mill but in the 9th century such an enterprise was happily going about its business in Cloontycarthy. Here the water from a mountain stream was used to turn a waterwheel that ground corn in a horizontal mill. The Cloontycarthy waterwheel is tangible evidence of the increase in agricultural output, the increase in population and a growing social sophistication that was County Cork in the Early Christian period.

ARTEFACT 51

Name: Spindle whorl
Location: Lisleagh ringfort, Kilworth
Material: Fired clay
Date: 7th-9th century A.D.
Period: Early Christian
Size: Diameter 4 centimetres; Thickness 1.3 centimetres; Diameter of central opening 1.3 centimetres
Collection: National Museum of Ireland

Spindle Whorl from Lisleagh ringfort. Image courtesy of Mick Monk.

This spindle whorl was found during the archaeological excavation of Lisleagh ringfort by Michael Monk, U.C.C., in 1984.[62] It has an overall diameter of just 4 centimetres and a thickness of 1.3 centimetres. It is roughly decorated with incised lines and an indentation close to the edge. The central hole is perfectly circular but slightly off-centre. The indent is interesting as it gives the whorl the appearance of the upper stone in a rotary quern used for grinding corn and these discs are known in folklore as *fairy millstones*[63].

Diagram shows a woollen thread being spun using a spinning whorl and a spindle shaft. Drawing by Sheila Ronan.

Of all the artefacts featured in this book one of the humblest must be a spindle whorl, a small disc of stone, bone or baked clay with a hole at the centre. And yet it represents a vital element in Early Christian Ireland, namely the production of wool. It is also a reminder of the role of women in early society. The early Irish laws, the Brehon Laws, expected "a farmer's wife to be involved in the major tasks of the farm" but in terms of sheep it was the man's responsibility to rear and shear the animals but his wife's was in "combing the wool, spinning it into thread, and weaving it into cloth[64]." The same was true for linen - the man's responsibility was growing the flax, the woman's in processing and finishing it as linen.

Spinning is the process of creating yarn or thread from a raw material like wool or flax. The resulting yarn/thread can then be woven into cloth and other textiles, producing clothing, blankets, etc. Once the wool is sheared form the sheep it is then combed to straighten the fibres. Once the fibres were combed they were wound on a distaff (a short stick). The spinner (known as a *spinster*) then draws in a few fibres from the distaff, twisting them between thumb and forefinger. This thread was attached to the spindle shaft below the disc and then knotted to a notch near the top of the shaft by a slip loop. Using a clockwise motion the wool was then spun, the whorl providing the weight to maintain the momentum of the spin, until a workable thread was produced. Thus, the spinning action of the spindle, with the help of the spinster's fingers, twisted the fibres together into yarn. The spinster would add more wool from the distaff until the spindle reached the floor; she'd then wind the yarn around the spindle and repeat the process. Spinsters usually stood as they spun so that the spindle could spin out as long a yarn as possible before it had to be wound.

The main feature of a whorl is its central hole through which the spindle shaft is fixed. The shafts are tapered to hold the whorl in a fixed position at a given distance from either the top or the bottom of the spindle shaft; variation in this arrangement affects the thread being produced in terms of tightness and thickness.

Excavations of prehistoric sites in Ireland have produced very few spindle whorls; however, we do know that cord was being spun from at least the Early Bronze Age as witnessed by the cord

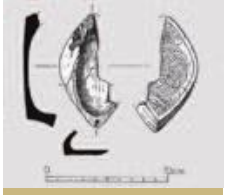
impressions used to decorate pottery in this period. The numbers found in excavations increase greatly once we are in the Early Christian Period, with most examples made from either stone, fired clay or animal bone. A study of Irish examples has shown that they have a *"weight range between 7.8g and probably not exceeding 500g ... often the lighter the whorl used, the finer the yarn produced. A diameter range between 34 – 134mm is standard with most whorls measuring less than 70mm in diameter. A central or almost central perforation with a profile not overtly slanted was desirable, with a perforation size between 7.5 – 33.9mm in diameter. A diameter below 4mm is probably too thin to have gripped the spindle sufficiently to spin even the lightest of fibre.*[65]"

Animal bones recovered from the archaeological excavation of Early Christian sites show stocking levels of cattle at 46%, pigs at 31% and sheep at 23%[66]. Sheep were reared chiefly for their wool which was prized for making clothes, blankets, and fleece. Native sheep had brown wool but by the 5th century imported sheep from the Late Roman world had improved the stock and a whiter wool was then being shorn. We don't know what was being traded for the wine and other luxury goods being imported from the 5th century onwards, but it is possible that part of this trade was the export of wool and woollen products.

Spindle whorls are simple artefacts in material, form and decoration. But they are a vital clue regarding two important aspects of life in Early Christian times - the production of cloth and the role of women in society. These are two things that are often very difficult to find in the archaeological record - cloth because it disintegrates so easily in the ground and women because so many of the artefacts from the period were typically produced by or relate to activities carried out by men.

ARTEFACT 52

Name: Toy boat
Location: South Main Street Excavation, Cork City
Material: Wood
Date: Late 12th century
Period: Early Christian
Size: Length: 10 centimetres; Width at centre 7 centimetres
Collection: National Museum of Ireland



Toy boat from South Main Street excavations.

In his review of the thousands of finds from archaeological excavations in Cork City, Maurice Hurley has identified a small number as children's toys chiefly due to their "lack of functionality by virtue of size[67]." These include a tiny wooden knife, a wooden key and some spinning tops. Two of the artefacts from these excavations are probably toy boats. One is this example, a small oval carving found in the South Main Street excavation by Máire Ní Loingsigh & Deborah Sutton[68]. This is an oval carving in the form of a simple craft with a pointed bow and stern; it is not entire as part of it was broken away in antiquity. It is decorated on the underside with an interlace pattern.

Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

Carved animal head (9cm in length) from Christ Church excavations (1975-77), Cork City.

Ship's prow carved in the form of an animal's head from the Bayeux Tapestry.

The second artefact, found in the Christ Church excavation, is less obviously part of a boat. It is a short piece of wood 9cm in length, broken away from whatever it was part of and carved with the head of an animal. Hurley describes it as "not a realistic representation of any known animal but the angle of the neck to the head and general shape bears a resemblance to a horse's head[69]." But what was it part of? If it was the prow of a toy boat then the form of that boat would be the standard *Viking* boat with a long slender body rising at both ends to a curved finial, sometimes in the shape of an animal's head as depicted on the Bayeux Tapestry. The context in which both toys were found and the style of the boat's decoration, date them to the late twelfth century when Cork was a Hiberno-Norse trading centre, a similar date to the Bayeux Tapestry.

Vessels like those shown on the Bayeux Tapestry were integral to the daily lives of people living in a twelfth century Hiberno-Norse trading port like Cork. Boats were the life-blood of these settlements. In a country that had no ports before the Viking settlements these places became essential for the export and import of goods and linked a place like Cork Harbour to a wider network of such ports, like Waterford and Dublin. With all this maritime activity it is not surprising that a child would be attracted by a small wooden model of a boat. If that is what the little carved wooden head from the Christ Church excavation really was, we can only imagine the child's dismay when the prow of his precious toy boat snapped off.

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Chapter 10
Norman Knights and a Gaelic Revival
The Medieval Period (1200-1600 A.D.)

The term *Medieval* (for *Middle Ages*) has changed in the way Irish scholars apply it in recent times. Most academics now use the term *Early Medieval* for what was once generally termed *Early Christian*. This is an attempt to get rid of *Dark Ages*, especially in Britain, for the period between the Romans leaving and the development of Feudal society, from the 5th to the 10th centuries. The term *Dark Ages* was never in usage in Ireland whose history is so different in the first millennium A.D. from our neighbours; in Ireland this has been called the age of *Saints and Scholars*, a Golden Age of enlightenment and learning. One of the difficulties with *Early Medieval* is what to call the following period when just *Medieval* might seem confusing - the very awkward term *High Medieval* has been suggested. One term that does seem easier to use is *Late* or *Later Medieval* - Irish history and archaeology is very different in the 15th and 16th centuries from what went before and comes after. In this book we use the traditional *Early Christian* as a general term for the period up to the 12th century and *Medieval* for the following period.

Ireland had been undergoing fundamental changes to its social, political, and religious make-up since the turn of the 12th century; the church had adopted the diocesan system to replace the old monastic order from the Synod of Ráth Breasail in 1111 A.D.; Viking port towns had brought the country into the international trading system; and the old order was being threatened by new dynasties like the Mac Murroughs in South Leinster. But those changes were nothing in comparison to what happened subsequent to Dermot Mac Murrogh bringing in a group of mercenaries in 1169 A.D. to help in his struggle to regain the Kingship of Leinster. These mercenaries were Normans, who saw in Ireland, a chance to establish new territories for themselves.

The Normans brought with them a completely different worldview to the native Gaelic order that had a profound and extensive impact on the country. They were improving agriculturalists, particularly the monastic orders and especially the Cistercians who were at the cutting edge of farming improvements throughout the medieval period. The Normans placed a great emphasis on tillage and introduced the wheeled plough with its mouldboard, pulled by teams of oxen[1]. Increased grain production helped feed the towns, like Cork, Kinsale, Youghal and Buttevant with their hungry populations. The Normans also placed an importance on sheep farming and introduced new species with better fleece - wool was in high demand and was exported from Ireland in the 13th and 14th centuries. They introduced new species like rabbits, pheasants, mute swans, as well as farmed fish like carp. Wherever they settled the Normans had a long-lasting and profound effect on the environment and landscape.

In 1177 A.D. King Henry II granted two of his faithful knights Robert fitz Stephen and Milo de

Medieval Cork showing length of back gardens behind street-front houses. Drawing courtesy of Donal Anderson.

Cogan a half each of the kingdom of Cork; fitz Stephen the half east of the city and de Cogan the half to the west. This was typical of the way the Normans operated in Ireland; the king granted land that was still in native hands to favoured knights but it was then up to them, from their own resources, to make good that land grab. In the end only half of the county was conquered by the Normans, roughly that area east of the Cork-Charleville main road and west along the coast to Barrymore[2].

When we look for surviving artefacts from Norman Cork they are few and far between- apart from what was found in the city excavations. One gold brooch found in Ballinrea near Carrigaline doesn't imply a lot of riches and it is a feature of 13th century Cork that no great Norman dynasty developed in the county that might have been able to afford luxury jewellery. This apparent lack of resources is also reflected in the small number and humble size of the county's 13th century castles as seen in the *Heritage Castles of County Cork* (2017).

One of the greatest contributions the Normans made in Cork was in developing towns and smaller urban centres around their manors. Before their arrival the only settlements in the county that approached urban status were the port towns established by the Vikings. By and large Gaelic life was rural and pastoral but the Normans placed a great emphasis on market

towns as a lynchpin of their economy. These towns operated under a charter granted to them by either the king or a local lord who gave them rights and privileges to operate largely in their own self interest. As well as taking over the existing settlement at Cork[3], Youghal and Kinsale, the Normans also founded the town of Buttevant[4]. These towns were surrounded by a wall with mural towers and fortified gates, inside which, the town operated its own rules and regulations according to its charter. One of the best surviving lengths of medieval town wall in the country is in Youghal.

In terms of artefacts the vast bulk of what survives has come from the various archaeological excavations that have taken place in Cork City. Because the city is built in a marsh the ground under the streets of the old town (North and South Main Streets) is constantly waterlogged. These anaerobic conditions result in incredible preservation of organic materials - wood, leather, fabric, etc. Also, because conditions were very cramped inside the town walls, rubbish was often dumped into pits dug in the rear gardens of houses - very good news for archaeologists. The outcome is a great assemblage of medieval artefacts from the city, mostly from the 12th through to the 15th centuries. Not alone did these excavations uncover a vast treasure-trove of information about medieval Cork but their rapid publication in a series of monographs is indeed a great achievement and full of interesting facts about the city and meticulously illustrated.[5]

The county does not have anything like this in terms of medieval artefacts. Only small-scale excavations have been possible in Youghal and Kinsale so that little is known of what might survive under the historic core of these two Norman towns. Neither is built in a marsh like Cork so preservation of organic material is probably not as good as in the city. Main drainage and resurfacing works on the main street in Buttevant by Cork County Council 2015-2017, facilitated a unique opportunity for archaeological excavation of the main throughfare of a medieval town. The original street level was uncovered and street-side features like a stone stairway associated with it were revealed.

Medieval stone stairway discovered by archaeological excavation on Main Street, Buttevant. Image courtsey of Rubicon Heritage.

Foundations of Caherduggan Castle as revealed by archaeological excavation. Image courtsey of Rubicon Heritage.

Archaeological excavations in conjunction with infrastructure developments, particularly the motorway and bypass schemes, has turned up medieval archaeology in rural Cork but not to the extent that it has uncovered prehistoric archaeology. One reason for this is that every effort is made to avoid known archaeological monuments when planning these developments. As much more is known about where medieval settlements are located, often indicated by the remains of a stone castle and/or church, it is easier to avoid them. Occasionally a surprise discovery of medieval date is made like the foundations of a castle in Caherduggan near Doneraile, found during an archaeological excavation in advance of realignment work on the R581, but that find is exceptional.

Two important medieval settlements were found on the M8 route. At Mondaniel, Rathcormac, was a unique undefended farmstead, and a defended farmstead, a *moated site*, at Ballyvinny South, Watergrasshill. The former produced a decorated quernstone and the latter produced sherds of a Saintonge Polychrome jug linking this rural farmstead to the wider world of the Atlantic wine trade. Saintonge pottery was also found at Rigsdale, a *moated site* near Innishannon, excavated by David Sweetman in the late 1970s. A penny of King Edward I was found under the enclosing earthen bank of the enclosure - probably lost during its construction - and suggests a date of around 1280 A.D. for the site.

Pilgrimage was a feature of the church in Early Christian times and these traditions continued into the medieval period and some down to this day. This is nowhere better illustrated than at Baile Bhuirne where devotion to Saint Gobnait is still very strong, especially on her feast day, 11th February and again on Whit Sunday (the 7th Sunday after Easter). A focus of the pilgrimage is the wooden statue of Gobnait which is kept in the local parish church. On the above occasions it is on public display and pilgrims measure a blue ribbon against the statue. The ribbon is then kept as a safeguard against illness over the following year.

Pilgrimages abroad were fraught with danger as they involved a sea journey; in 1507 the Lord of Barry Roe and his followers left Cork and made the pilgrimage to Santiago de Compostella in Spain but, as reported in the Annals of the Four masters, "having performed the pilgrimage

Reconstruction of moated site at Ballyvinny South, Watergrasshill. Image courtesy of T.I.I.

they went into a ship to return, and their death or their lives have not been known ever since[6]." A more successful pilgrim made the journey to Canterbury to the Shrine of Saint Thomas Beckett in the 13th century - the souvenir badge from that pilgrimage was found in the South Main Street archaeological excavation, Cork City.

Between the 12th and the 16th centuries some 400 new religious monasteries were founded in Ireland, some 20 of these in County Cork. The county had its great 12th century Cistercian abbeys but hardly a stone upon a stone survives of these monuments today. The Cistercian abbey of *St Mary of Chore* lies somewhere beneath the Church of Ireland graveyard in Midleton, and whatever is left of the abbey of *Castrum Dei* now lies beneath the town of Fermoy. The site of Tracton Abbey is partially occupied by the Church of Ireland

A pilgrimage badge from Canterbury, made of lead, dated back to the 13th century, depicts St. Thomas crossing from France to England in a ship. It was acquired as a testimony of a successful pilgrimage to the saint's shire in Canterbury. Image courtesy of Cork Public Museum.

churchyard and by farm buildings. The other great order to come into Ireland in the 12th century, the Augustinians, is represented by the remains at Bridgetown Priory, Castletownroche, and Ballybeg Abbey, Buttevant.

Substantial ruins remain of the Franciscan friaries at Buttevant, Kilcrea and Sherkin Island, but their houses at Youghal, Cork and Bantry have left no standing remains; some carved stone from the friary can be seen in Bantry graveyard. Sherkin Friary was founded in 1449 A.D. by Fineen O'Driscoll, chief of a clan noted for their piracy. It is smaller in scale that Kilcrea but nonetheless perfect in its own right as a late-medieval rural friary. In conjunction with conservation works at the site by the Office of Public Works, archaeological excavations in the friary were conducted by Ann Lynch and by Gerry O'Sullivan[7]. These revealed a great deal about how the friary was constructed and was altered over time but little was found in the way of 15th or 16th century artefacts. The only domestic artefact assigned to the 15th / early 16th century was a fragment of a glass drinking vessel. However, the presence of late 15th/16th century continental wares suggests that the friars had access to high status table wares. It is likely that more mundane domestic baskets and wooden vessels would also have been in use, but these have not survived. The iron buckles and iron knife recovered may also have belonged to the friars.

Two other medieval monasteries have recently been archaeologically excavated in Cork. The Priory of St Mary of the Isle (*de Insula*) and the Knights Hospitallers' preceptory at Mourneabbey.

St Mary of the Isle was a Dominican Priory founded by Philip de Barry in 1226 A.D. The buildings of the Priory had long been levelled and replaced by 19th century industrial buildings. When these were demolished to be replaced by a housing development the developer paid for an archaeological excavation of the site in 1993. This uncovered the north range and the cloister area of the priory. Two phases of building were evident: The earliest of 13th century date and the second of mid 14th/late 15th century date. The main discovery of the excavation was 218

Reconstruction of a late medieval friary with its cloister on the south side of the church. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

Part of church wall under excavation at Mourneabbey preceptory

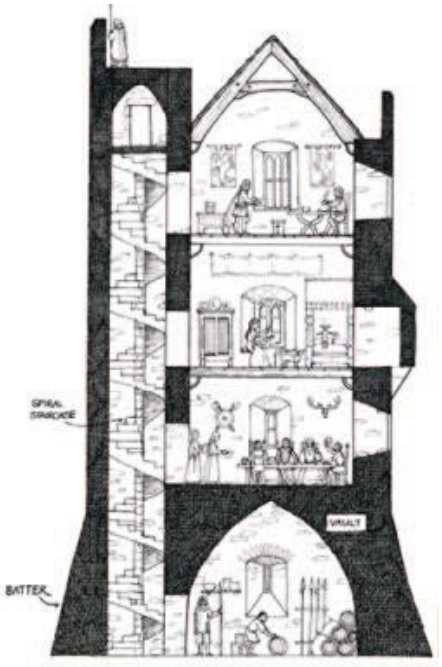
Sheela na Gig found in archaeological excavation at Glanworth Castle. Image courtesy of the National Monuments Service.

burials, most in slab-lined graves and most dating from the 13th to the 15th centuries. These skeletal remains represent a cross section of the medieval population of Cork and a great deal of information about lifestyle, disease and medical treatments in medieval Cork was revealed by a study of these bones. Catryn Power's analysis contains a trove of information about diet, diseases, medical treatments and causes of death in medieval Cork[8].

The Knights Hospitallers preceptory of Mourneabbey was archaeologically excavated in 2000-2001 and 2010, in conjunction with conservation works to the remains of the ruined church by Cork County Council[9]. The main finds from the excavation were fragments of ceramic floor tiles, including one complete example. The tiles were decorated with a mixture of fleur-de-lis, animal and floral patterns. These are all that are left of a mosaic of tiles that once covered the floor of the preceptory. The only other finds were fragments of sandstone roof slates.

Conservation works by Cork County Council at some of the county's medieval church ruins have also revealed a number of interesting finds. At Kildorrery some carved stones were found that were once part of the early 13th century church, part of which still stands. At nearby Aghacross a bullaun stone as well as fragments of a number of rotary quern stones were discovered during conservation works; similar finds were made at Coole church, near Castlelyons.

The most important archaeological excavation of an early Norman castle in County Cork was at Glanworth Castle[10] . This excavation in the early 1980s was carried out by the Office of Public Works in conjunction with a conservation programme at the castle. The excavation revealed a



Reconstruction of life inside a towerhouse: storage on ground floor; dining on 1st floor; private accommodation for Lord's family on 2nd floor; hall on top floor for public business. Access to all floors via a spiral stone stairs. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

complex history of construction over several centuries. Finds from the excavation were not plentiful and most of those dating to the medieval period were sherds of pottery, some locally made, others were imported from Bristol and the Saintonge area of Southwest France. But the most outstanding find from the excavation was a Sheela-na-gig exhibitionist figure. This was found in the castle's vaulted prison cell and appeared to have been deliberately hidden there around the 17th century. This is one of ten examples of these figures known from County Cork, four of which are known only from an antiquarian description. Of the extant examples two are on display in Cork Public Museum, one from the Ringaskiddy area and the other was found at the site of the medieval Cistercian abbey of Tracton, Minane Bridge.

The other important excavation of a castle in county Cork was at Barryscourt Castle, Carrigtohill[11]. This was carried out between 1992 and 2013 in conjunction with a conservation and restoration project by the Office of Public Works. This is not a castle built by the Normans but a Late Medieval towerhouse built by the Barry family who were of Norman stock but by the 15th century were well integrated into Gaelic society; *more Irish than the Irish themselves* - as the saying goes. Sherds of 13th century local and imported pottery were evidence of settlement at the site before the building of the towerhouse. Contemporary with the towerhouse were two fragments of two spurs, one made of iron and the other a copper-alloy. Also found was a corroded silver halfpenny of Richard II (1377-1399).

Castles are rarely found in advance of infrastructure developments - these are avoided or permission is not granted if too close - so the discovery of the foundation of a towerhouse at Caherduggan, Doneraile, as part of archaeological work in advance of road realignment by

Cork County Council, was a surprise. Beside the foundations a well was found and very fortunately from an archaeological point of view it was waterlogged. This enabled a unique leather strap, part of a horse harness, and two leather shoes, to survive. Both are medieval in date and unique finds in the context of a rural site where ground conditions are usually too dry for such survivals.

Towerhouses are part of the great rebuilding that took place in county Cork in the 15th and 16th centuries when a revival of Gaelic culture combines with the Old English world of Norman heritage. Three books were produced in Cork at that time that demonstrates the vitality of that revival. The Book of *Mac Carthaigh Riabhach*, more widely known as The *Book of Lismore* because it was found in Lismore Castle in 1814, is a miscellaneous collection of ancient texts written on vellum for Finghin Mac Carthaig and his wife Caitilin in the late 15th/early 16th century[12]. It does not survive in its entirety but still runs to 198 folios (pages) written in two columns, and now bound in a modern leather binding. It is one of the greatest manuscripts of medieval Ireland and a unique and invaluable source of early Irish literature. The Duke of Devonshire, whose family owned the book since the 17th century, has recently donated it to the library collection of University College Cork. The second great medieval book from Cork is *The Book of Fermoy*, written in Irish in the fifteenth century for the Roche family who were Lords of Fermoy. It contains medical texts, a Roche family history, Lives of Saints, genealogies, mythological tales and poems of Gearóid Iarla, the third Earl of Desmond. It is now in the collection of the Royal Irish Academy. The third book, now known as the *Rennes Manuscript*, was made in the Franciscan Friary at Kilcrea, Ballincollig[13]. This survives as 125 folios (pages) of poor-quality parchment. The manuscript contains a very important *Dindshenchas* - legends and stories about various places in Ireland.

Discarded animal bones are found in many archaeological excavations of the medieval period, both because they were discarded easily as worthless and because they survive in most ground conditions over time. Less obvious but also recoverable are plant remains like seeds, nuts, grains etc. None of these are greatly significant in their own right but taken together are invaluable in piecing together the medieval environment and how people farmed and prepared and cooked their food. They also reveal much about the economy and the trades of the time. Another everyday artefact that tells much the same story is the rotary quern. Composed of two stones, a bed-stone and a runner-stone, these are used to manually grind

The scriptorium at Kilcrea Friary with its row of large windows to help the friars in their work copying manuscripts

Butchered sheep and pig bones from the Cork City archaeological excavations. Image courtesy of Margaret McCarthy.

corn. At a time where water-powered mills were also in use they show that in some communities, self-reliance was the preferred way of producing ground corn rather that bringing your corn to a mill where a charge was likely to the miller and probably a tax as well.

The artefacts selected as exemplars below are a mixed collection that vary from unique valuable artefacts to very mundane and everyday objects. But each has its own story to tell as part of the broader pictures of Cork's medieval heritage.

ARTEFACT 53

Name: Statue of Saint Gobnait
Location: Baile Bhuirne (Ballyvourney)
Material: Oak
Date: 13th century
Period: Medieval
Size: Length 75.5 centimetres; Width 18 centimetres
Collection: Baile Bhuirne (Ballyvourney) Parish Church

This finely carved oak figure shows Saint Gobnait in full, from head to toe. She wears a nun's habit, with head veil and mantle over a flowing dress drawn in by a simple belt at the waist. The head dress is medieval in format, with coif and wimple around the head, neck and chin, and veil behind. This would have ensured that the hair was kept tucked away. It measures 75.5cm in length and at its widest, at the shoulders, is 18.5cm wide, while the feet area is 15.5cm wide. The figure is shown with her left hand elevated on her chest in a prayerful gesture and the other hand is down, along the length of her habit, holding a fold in her dress. Some traces of red, blue and white paint can still be seen but generally the wood has been polished and worn from rubbing by pilgrims over the centuries. In a number of areas, particularly the face, woodworm

Statue of St Gobnait, Ballyvourney. Image courtesy of Connie Kelleher.

Side and rear view of St Gobnait statue. Image courtesy of Connie Kelleher.

Saint Abbán's Grave, Ballyvourney.

has caused much damage with only one eye now remaining. Though disfigured by the erosion of time, the figure has been described as having "such character and virility of expression that one could well understand its reputed power[14]."

The back or reverse side is concave, in a 'v' shape from the shoulder area down to the feet, suggesting that it may have originally been carved to strap it or slot it onto an upright post to allow full appreciation of the wooden figure in its heyday, possibly carried as part of the pilgrimage procession.

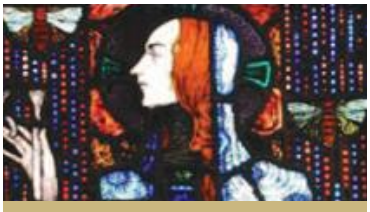
Gobnait of Baile Bhuirne is a female saint who is one of the best known and still venerated of Cork's early saints. No Life (*Vita*) of the saint survives though one existed in the 17th century and was subsequently lost. This is probably the main source of the rich tradition that exists regarding Gobnait's life[15]. Her ancestral home is believed to have been in county Clare from which she moved to Inis Óirr (Inisheer), one of Aran Islands. Here she was told by an angel to travel on until she found nine white deer grazing and that would be her place to settle and found a nunnery. She travelled on through Limerick, Waterford and Kerry, until finally spotting the nine white deer in Baile Bhuirne where she settled and built her church. The tradition also links Gobnait with bees that she used to attack her enemies and also she had a reputation as a healer, particularly of small pox. Gobnait is scarcely mentioned in any of the early sources except in the 13th century *Life of Abbán*. In this Saint Abbán appears as the confessor of Gobnait and it was he who gave her the lands on which she established her nunnery. Though a Wexford saint, Saint Abbán has a strong association with Baile Bhuirne; half a kilometer southeast of Saint Gobnait's church, in Shanacloon Wood, is St Abbán's Grave, a low cairn of stones surrounded by three ogham stones and a bullaun stone[16].

Paul MacCotter sees a deeper level to the Gobnait tradition that pre-dates Christianity. He sees in this, traces of "*Gobniu*, the male Celtic god of metalworking who also had a secondary but quite strong role as a healer ... surviving in the popular imagination as the *Gobbán Saor*, the magical builder of early literature[17]." Interesting that Saint Gobnait is the patron saint of ironworkers.

Her nunnery site, in the townland of the Glebe, comprises the remains of a medieval church, two holy wells, a round house, penitential stations, a graveyard and what is said to be the saint's burial mound. In advance of the erection of the finely carved stone statue of Saint Gobnait by sculpture Seamus Murphy in the 1950s, which overlooks the graveyard and church today, the round house and holy well were excavated by Professor Michael J. O'Kelly of University College Cork. Evidence for two phases of habitation was found – first in a rectangular timber house and then the stone-built round house. Intriguingly, both phases also produced results of smith working, in tool technology and smelting activity.

The carved figure is brought out twice a year, once on her feast day, 11th February and again on Whit Sunday (the 7th Sunday after Easter). The statue is put on display in the parish church where devotees queue, each with a length of ribbon, and after making the sign of the cross with the statue, they sequentially wrap the ribbon around the legs, then the waist, then the neck and finally rub the face of the statue with the ribbon. The devotee then finishes by kissing the statue on the face and retains the ribbon, known as *Tomhas Gobnatan* or 'St Abbey's measure'. The ribbon, thereafter, is believed to be good for sore throats (i.e. wrapped around the neck), and other ailments.

Measuring the Statue of Saint Gobnait. Image courtesy of Connie Kelleher.



St. Gobnait with her bees, as depicted on a stained glass window by Harry Clarke in The Honan Chapel, U.C.C.

Painting of St. Gobnait in the woods in Baile Bhuirne by local Cork artist Demelza Nowell; legendary connections are also illustrated including the honeycomb and her link with bees, as well as the nine white deer (Demelza Nowell, 2019).

ARTEFACT 54

Name: Brooch with projecting hands
Location: Ballinrea, Carrigaline
Material: Gold
Date: 13th-14th century
Period: Medieval
Size: Length 15.5 millimetres; Width 15.5 millimetres; Thickness 2 millimetres
Collection: National Museum of Ireland

Gold brooch from Ballinrea, Carrigaline. © National Museum of Ireland.

Ring brooches are a particular type of medieval jewellery worn by men and women across Europe in the 13th, 14th and 15th centuries. In her catalogue of ring brooches in Ireland, Mary Deevy lists 140 examples with just two from Cork, a very plain copper-alloy brooch from the archaeological excavation at Christchurch in Cork City and the example pictured above - a gold brooch found in the 1950s in a ploughed field in Ballinrea near Carrigaline[18].

The brooch's ring is oval but pointed towards one end where a pair of open hands is joined as if in prayer. The ring is triangular in cross-section. The pin is attached on the right hand side of the ring as worn with the hands pointing downwards. It too is triangular in cross-section. Two square *rosette* plates are attached to the ring, one at the top and one on the side opposite the pin pivot. There is a third smaller one on the pin itself. The sides of both the ring and the pin are decorated with a zig-zag pattern of short incisions.

Brooch on Effigy of woman, Cashel. Late 13th/early 14th century.

Brooch on Effigy of woman, Cashel. Late 13th/early 14th century.

This is one of eight ring-brooches from Ireland with projecting hands, six of these are made of gold, the other two of silver. One is provenance to County Kilkenny and another to County Meath but no location information is known for the other five brooches. Two of the brooches have inscriptions that help to date them and show their purpose. The inscriptions are in 13th/14th century medieval French showing the Norman French connection, as the Normans were speaking French when they arrived in Ireland. The Meath brooch inscription reads (in translation) "I am here in place of the friend you love." The other inscription, on one of the unprovenanced brooches, reads (in translation) "Hail Mary full of grace." The *Angelic Salutation* on the latter brooch reinforces the emblem of the praying hands to underline the religious nature of the brooches. The other inscription shows that some of these brooches were gifts given as tokens of love. Gifts of jewellery were part of the rituals of courtly love (*l'amour courtois*) that would be familiar in the Norman world of medieval Ireland.

The Norman element of these brooches is reflected by their distribution. Carrigaline and Cork City, where the two cork brooches were found, are within the borders of Norman Cork. Elsewhere in the country the brooches were found in medieval towns, in locations such as South Leinster, Meath and Westmeath, and East Ulster - all areas within a strong Norman presence.

How these brooches were worn is shown on medieval statues and carvings of the period. Two full-size effigies of ladies in 13th/14th century dress (see images on previous page), now in the churchyard of the Church of Ireland cathedral in Cashel, Co. Tipperary, are both wearing brooches in the fashion of the time[19].

ARTEFACT 55

Name: Saintonge Polychrome pottery
Location: Ballinvinney South, Glanmire
Material: Pottery
Date: 13th/early 14th century
Period: Medieval
Size: Restored jug would be around 25 centimetres in high
Collection: National Museum of Ireland

These sherds of pottery were found during the archaeological excavation of a *moated site* at Ballinvinney South, Glanmire in advance of the M8 motorway. In total thirteen sherds were found in the fill of a pit and all coming from a single vessel, probably a jug.

Sherds of Saintonge polychrome pottery from excavations at Ballinvinney South, Glanmire. Image courtesy of T.I.I.

Saintonge jug- the Ballyvinney sherds are from a vessel like this.

Two sherds of Saintonge pottery from the Church Street excavation in Youghal. Image courtesy of Dan Noonan.

The largest group of continental pottery imported into Ireland after the Norman invasion is from the south-west of France and is associated with wine imports from the Bordeaux region. The marriage of Eleanor of Aquitaine to Henry II of England in 1152 brought the southwest of France into the realm of the English kingdom and trade quickly flourished between there and England, and with Ireland, after the Normans had arrived in the country from the 1170s.

Saintonge is an area close to Bordeaux and the pottery kilns in this region were producing vast amounts of pottery for export from the late 12th century through to the mid-14th century. This is wheel-turned pottery, glazed and hand painted, that was produced on an industrial scale and exported in vast quantities to Britain and Ireland. Archaeological excavations of medieval sites in Ireland, particularly in Norman towns like Cork, have produced a vast quantity of sherds of Saintonge pottery[20]. The majority of these French vessels are wine jugs - tall, green-glazed, with spouts like a parrot's beaks. The most attractive of them are the polychrome jugs with their painted designs of birds, shields and foliage patterns. It is one of these jugs that the sherds found in the Ballyvinney moated site were once part of.

Two sherds of Saintonge pottery were found during the archaeological excavations carried out for Cork County Council on Church Street in Youghal in 2008 as part of a street up-grading programme. These are sherds of Saintonge green glazed pottery. This type of pottery was very common in the Cork City excavations and represented over half of all the medieval pottery found in the city. This further emphasises the trade links between Cork ports and the Southwest of France during the 13th and 14th centuries.

ARTEFACT 56

Name: Ceramic floor tile
Location: Mourneabbey
Material: Fired clay
Date: 13th century
Period: Medieval
Size: Length 11 centimetres; thickness 3.5 centimetres
Collection: National Museum of Ireland

Floor tiles from Mourneabbey - the near complete example is bottom right decorated with a rosette; upper left has a castle turret whilst upper right is part of a fleurs-de-lis (scale in centimetres). Image courtesy of Eamonn Cotter.

During the excavations of the Knights Hospitallers preceptory of Mourneabbey in 2000-2001 and 2010, numerous fragments of decorated medieval floor tile were recovered, as well as one near complete example[21]. They all conform well to the type referred to as *two-colour square tiles*, examples of which are known from several sites in Ireland. The decorative patterns from Mourneabbey include a castle, a hound, as well as fleurs-de-lis and rosettes. The tiles are square and measure 11 centimetres in length and are 3.5 centimetres in thickness. They are made of fired red clay with the decorative patterns in a pale yellow slip.

Floor tile featuring a hound- photographed in situ during the excavation. Image courtesy of Dan Noonan.

Floor tiles were a feature of 13th century churches in Ireland. The patterns on the tiles were combined to form mosaic designs; since no two church plans are the same it seems that tiles were produced individually for each church and the designs may reflect the coat-of-arms of the church's patron or of the town if in an urban setting.

The Mourneabbey tiles are of the two-colour variety, that is the tile itself is fired in one colour clay but with an inlay on its top surface into which a different colour clay is inlaid. The tiles were then glazed before firing in a kiln. The designs last very well because of the inlay whereas the wear and tear of the years have eroded much of the glaze.

ARTEFACT 57

Name: Peytrel
Location: Caherduggan, Doneraile
Material: Leather, bronze
Date: 13th/14th century
Period: Medieval
Size: Length: 1 meter
Collection: National Museum of Ireland

Section of leather peytrel from Caherduggan. Image courtesy of Rubicon Heritage.

Drawing of mounted horse with the peytrel around the horse's chest. Drawing by Sara Nylund, as featured in the Colourful Heritage of County Cork Vol. 2.

Buckle and pendant on the Caherduggan peytrel. Image courtesy of Rubicon Heritage.

The Caherduggan peytrel as found directly from the well. Image courtesy of Rubicon Heritage.

The discovery of the foundation of a towerhouse at Caherduggan in 2011, Doneraile, as part of archaeological work in advance of road realignment on the R581 by Cork County Council, was a surprise. Road schemes normally avoid known archaeological monuments but the location of the castle was not known beforehand.

Beside the foundations of the towerhouse was a well and because it was waterlogged organic materials like leather were perfectly preserved in these anaerobic conditions. What the well contained was astonishing - a leather belt and two leather shoes.

The leather studded belt turned out to be something even more unusual and precious than anyone realized. Almost three feet long, the belt was not for human waists but for horse chests. It's a peytrel, also known as a breast-collar, the part of a harness that connects the saddle to the breast plate. The studs aren't studs, they're a group of 36 gilt copper-alloy heraldic shields decorated with lions counter-rampant (meaning they face to the viewer's right). Each pendant is connected by a hinge to a fixed mount that also bears the counter-rampant lions. The hinges ensured the pendants would move prettily when the horse was in motion.

At each end of the strap are gilt copper-alloy buckles. They were recycled, cut off another piece and attached to the ends of the peytrel so that it could be attached to harness fittings on the saddle and breast plate. They were too valuable to discard once whatever they were previously attached to wore out, and the peytrel with all its pendants was of course even more valuable. However, it ended up down that well, it's unlikely to have been deliberately thrown away but how or why that happened is a matter of conjecture.

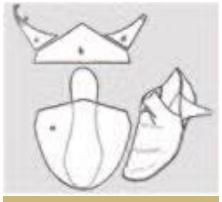
The counter-rampant lions may help answer some questions. It's an extremely rare design. The Office of the Chief Herald in Ireland is looking into possible associations, but they may have simply been a decorative choice rather than a nobleman's arms. Even if it turns out to be impossible to establish the owner or affirmatively connect the piece to a specific noble house, it is still an exceptional discovery.

Post-excavation analysis has revealed it is the only intact example ever found in Britain or Ireland and it may have belonged to a medieval knight or one of his retainers or retinue. It certainly belonged to someone important in the medieval period. This is a hugely significant find in Ireland. Thousands of medieval heraldic pendants from harnesses have been found in Britain in Ireland, but this is the only peytrel to survive with every part, including the leather, intact. That makes this a discovery of international significance, one of the greatest secular medieval leather objects ever discovered in Ireland.

The two reasonably complete shoes recovered from the well are quite different and represent different stages in the evolution of medieval footwear. The earlier of the two is typical of side-laced shoes and ankle-shoes of the twelfth and thirteenth century and similar finds have been recorded from various sites in Ireland such as Dublin, Waterford and Cork. However, while it is similar in style to these it differs in function in being an indoor shoe with its closest parallel in London and is a rare example in an Irish context. These shoes give a glimpse to the sophistication of the people who wore this footware in Caherduggan in medieval times.

Leather shoe from Caherduggan excavation. Image courtesy of Rubicon Heritage.

The second shoe, which was found in a ditch, is an equally rare example of a medieval Irish shoe though all previous examples have been found in bogs. The shoe, with separate vamp and quarters is an example of a 'Brogue' and is described and classified by Lucas as a Type 5.



Lucas type 5 leather shoe, like the example found at Caherduggan.

One of the Caherduggan leather shoes was bound on the side like this example. Image courtesy of Rubicon Heritage.

ARTEFACT 58

Name: Capital
Location: Kildorrery graveyard
Material: Red Sandstone
Date: 13th century
Period: Medieval
Size: Carved capital 20 centimetres in height
Collection: On display in Kildorrery graveyard

Carved capital from Kildorrery medieval church. Image courtesy of Eamonn Cotter.

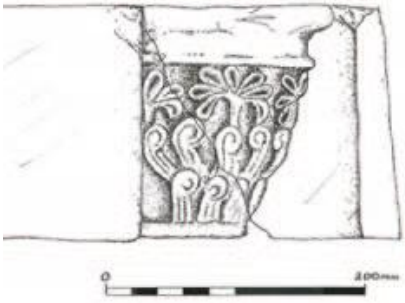
The medieval church of *Cill Dairbhre* is located in the graveyard of Kildorrery village in North Cork. In recent years the church had become densely overgrown with trees and ivy and the stonework was deteriorating. A programme of works by the Cork County Council conservation team cleared the site of overgrowth and stabilised the stonework. During clearing of rubble, under the supervision of archaeologist Eamonn Cotter, sixty-four fragments of worked stone were recovered, amongst them the carved capital pictured above.

Very little is recorded of the history of the church; the earliest mention of a church here is in the Papal Taxation of 1291. The church was in repair in 1615 but was in ruins in 1641 and has been ever since.

The antiquarian Windele visited the church twice in the late nineteenth century. On his first visit he noted: "In the north wall of the chancel is a square recess, a foot in depth, three feet in length, two feet in height, bordered with a double torus moulding and a foliaged pattern." Following a subsequent visit he complained bitterly of the "…moulded and floriated stones half gone for grave heads. The peasantry, whether as grave makers or gold dreamers, ruthless destroyers. Pillar caps and sculptures at every grave head." These can still be seen in the graveyard.

The capital is carved in red sandstone. It formed the rear-arch on one side of a window embrasure and when set in place just the carved capital was visible. The foliage decoration is in three tiers, the bottom two tiers are composed of similar curved patterns, but the upper tier has lobed trees. The arrangement is organic rather than geometrical. The capital is typically thirteenth century in style.

A moulded jamb section reused as a headstone.



Drawing of carved capital from medieval church in Kildorrery. Drawing by Ita O'Brien.

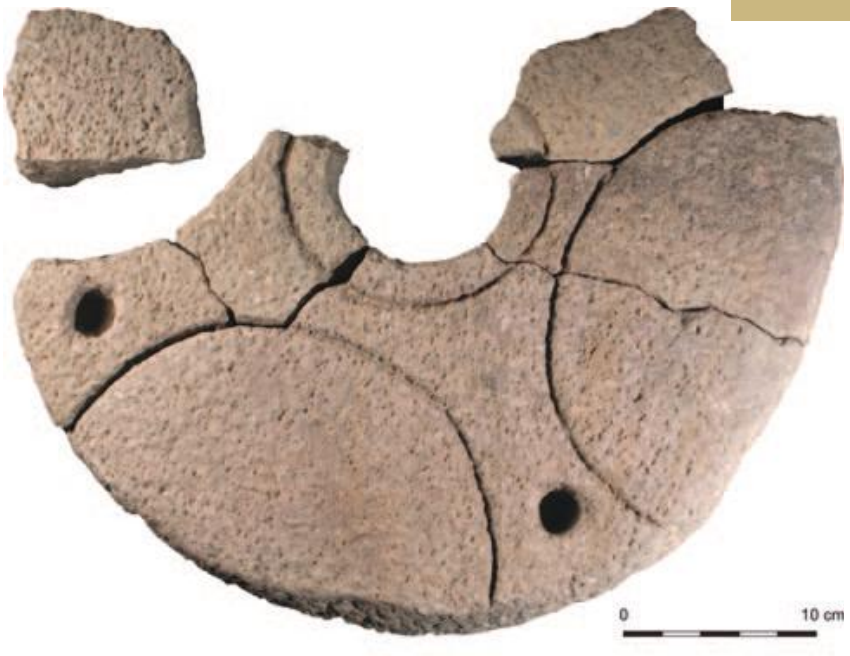
The Kildorrery fragments are surprising for two reasons. Firstly, the level of architectural achievement is unusual for a rural parish church as this kind of carving is more usually found in cathedrals or in monastic churches. These carvings suggest a significant investment by a wealthy benefactor in the building of the Kildorrery church. Eamonn Cotter suggests the style of the detail makes it closely comparable to the architecture of the 'School of the West', an architectural style found mainly west of the Shannon in churches of the early thirteenth century. The closest parallels found for these fragments are those at Killaloe Cathedral in county Clare and at Banagher in county Derry. These comparisons suggest strong links between this area of North Cork and the West of the country in the 13th century[22].

Second carved capital found at Kildorrery Church. Drawing by Ita O'Brien.

ARTEFACT 59

Name: Rotary Quern Stone
Location: Mondaniel, Rathcormac
Material: Stone
Date: 13th/14th century
Period: Medieval
Size: 45cm in diameter
Collection: National Museum of Ireland

Surviving part of decorated quernstone from Mondaniel, Rathcormac. Photo by John Sunderland, image provided courtesy of T.I.I.



This broken quern stone was discovered during an archaeological excavation in Mondaniel townland, Rathcormac, in advance of construction work on the M8 motorway. This was the upper runnerstone of a pair of stones that make up a rotary quern used for grinding corn by hand. The stone measures 45 centimetres in diameter and the central opening is 8 centimetres wide. The six broken fragments of the stone were found in a rubbish pit associated with two rectangular houses of 13th/14th century date. As there was no indication that these houses were situated within an enclosure like a *moated site*, they are the first instance of an undefended medieval farmstead discovered in county Cork[23].

Artist's impression of undefended medieval settlement at Mondaniel townland, Rathcormac. Image courtesy of T.I.I.

Rotary quernstones were introduced into Ireland in the late Iron Age - 1st or 2nd century A.D. They were widely used in the medieval period and continued to be used in remote areas like Inishmurray Island into the late 19th century.

Rotary quernstone being used on Inishmurray Island, county Sligo, in the late 19th century. Note the wooden handle being used to turn the upper runnerstone, the cloth used to collect ground corn being spun out from the quern, and the platter of grains ready to be introduced into the quern via the central opening at the top.

The Mondaniel runnerstone has two perforations to house a wooden turning handle; only one is necessary so the pair may have been part of the stone's decoration. The upper surface is decorated with incised lines forming a regular pattern. This consists of a circle defining the central opening, and four (originally) semi-circular arcs defining a cross with expanded terminals; only one arm of the cross survives intact. The incisions may have caused a weakness

in the stone as it appears to have split along these lines. The working under-surface is concave and its peck-dressed surface is worn smooth especially along the outer edge.

Rotary querns have defined diameter limits of some 30-60cm, with thicknesses generally ranging from some 5cm to 10cm. They have a high diameter/thickness ratio, generally greater than 4 to 1. With some exceptions, quern weights fall roughly within the region of 20-30kg. Stones that exceed 60cm in diameter were considered more likely to be millstones[24].

This design on the runnerstone of a quern from Corteen, county Galway is almost exactly the same as the Mondaniel stone[25], and a broken fragment from the townland of Caherfurvaus near the village of Craughwell, also in Galway, has a very similar cross of arcs[26]. The reason why some quern stones were inscribed with a cross was not merely to be decorative but was related to an obligation on tenants of monasteries and manor to use the local watermill where a tax was levied on them. Private querns were banned by some landlords who either confiscated or broke them. The cross may have had some message in this respect, perhaps indicating special permission from a monastery for its use.

In addition to the production of flour, querns were also used to grind malt barley for making alcoholic drinks, an important component of the medieval economy. The decline in the use of querns in rural Ireland in the 19th century has been attributed to the availability of treacle, which eliminated the necessity for grinding malt barley to make poteen.

The quern stone is an enduring reminder of the small-scale self-sufficient economy of rural medieval Cork, a world that rarely appears in the historic record but evidence for which we find in the unenclosed farmstead at Mondaniel where our quern was used by the people of that forgotten community.

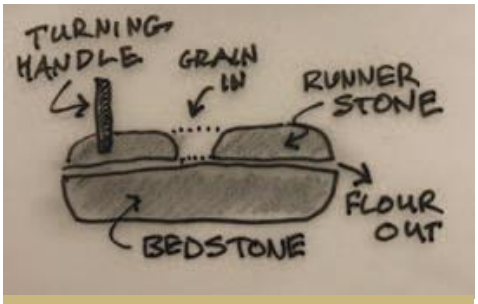


Diagram of rotary quernstone.

Selection of broken fragments of rotary querns found at Aghacross Church, Kildorrery, during conservation works by Cork County Council (scale is a mobile phone).

ARTEFACT 60

Name: Book of Lismore-
Book of Mac Carthaig Riabhach
Location: Kilbrittan Castle
Material: Vellum
Date: 16th century
Period: Medieval
Size: folio size: 37 centimetres by 25.5 centimetres
Collection: University College Cork

Book of Lismore. Image courtesy of U.C.C.

In 1814 during renovation works at Lismore Castle, the Irish residence of the Duke of Devonshire, the workmen made an extraordinary discovery. Sealed up in a blocked doorway they found a crozier and a wooden box[27]. The crozier, now known as the *Lismore Crozier*, is one of the great treasures of 12th century Ireland, now in the collection of the National Museum of Ireland. In the box was a large wad of vellum folios (pages). Unfortunately, they were not in great condition due to dampness and having been gnawed in places by rodents. Also, at this time some of the folios disappeared - probably taken by some of the workmen. From thence the manuscript was loaned out by the Duke's agent to a number of Gaelic scholars and enthusiasts, not always receiving the care it deserved. In 1930 the book was taken from Lismore to the Devonshire's English residence, Chatsworth House, where it remained, except for removal to safe storage during the Second World War, until 2020 when the Duke of Devonshire donated it to the Boole Library collection in U.C.C. The book is now bound in a leather cover made for it in the 1940s.

The Book of Lismore (*Book of Mac Carthaig Riabhach*) was commissioned by Finghin Mac Carthaigh Riabhach, Lord of Carbery 1478-1506, and his wife Caitlín. It is written in two columns on folios of vellum, 198 of which survive; the first forty pages are missing and an unknown number from the back of the book. Though transcribed in the late 15th century the material it contains is much older and written in a form of Irish that was archaic even by the later medieval period - this was not bedside reading for the Mac Carthaigh Riabhachs. The content is a vast miscellany of texts from a wide variety of sources: saints' lives; religious poems and tracts; a History of Charlemagne; the Travels of Marco Polo; poems, legends, lore and a variety of other material that reach back to the beginnings of Irish literature. Of particular interest to historians of North Cork is a text known as *Crichad an Chaoilli*, a description of the topography of the eastern half of North Cork in pre-Norman times, a text which is part of the book.

Two other ancient books from County Cork are also testaments to the county's rich medieval heritage. *The Book of Fermoy (Leabhar Fhear Maí)* is a collection of manuscripts written in Irish in the fifteenth century for the Roche family, Lords of Fermoy. It was commissioned by David Mór Roche and compiled in the 1450s/1460s. Some of the scribal writing is similar to that in The Book of Lismore so both are drawing from the same sources. It also is a compendium of a wide variety of material, medical texts, a Roche family history, lives of Saints, genealogies, mythological tales and poems by Gearóid Iarla, the third Earl of Desmond. *The Book of Fermoy* is now in the collection of the Royal Irish Academy.

"[Beatha Phádraig]," 42.r, Ls. 204, The Book of Lismore, Special Collections, U.C.C. Library, University College Cork.

The other medieval book has travelled further to find a home - it is now in the collection of the municipal library in Rennes, Brittany, and is consequently now known as *The Rennes Manuscript*[28]. It was compiled in the famous scriptorium at Kilcrea Friary, Ovens. The book consists of 125 folios (pages) written in Irish, but on poor quality parchment. It is believed that this book may be slightly older than those just mentioned and like those books, it contains a miscellany of texts from a variety of sources. These include Saints' Lives, The Travels of Sir John Mandeville, and a *Dindshenchas* as in the *Book of Lismore*.

ARTEFACT 61

Name: Cattle bones
Location: Grand Parade, Cork City
Material: bone
Date: 13th-15th centuries
Period: Medieval
Size: Average length 20 centimetres
Collection: National Museum of Ireland

Animal bones are found in most archaeological excavations, they survive in most ground conditions and were discarded in great numbers wherever people lived. In crowded and enclosed spaces like walled medieval towns disposal of rubbish was always a problem and tended to be dumped into middens and pits dug in the back garden of houses; burying bones may also have been a way of discouraging dogs or rodents scavenging the bones though some bones from the excavations show signs of having been gnawed. Thousands of animal bones have been recovered from the many archaeological excavations that have taken place in Cork City since the 1980s. These tell us a great deal about the diet of urban dwellers but also by implication about farming in the surrounding countryside.

There is an inbuilt bias in the recovery of animal bones in an archaeological excavation. The bones of fish and birds can be difficult to spot - some of them are very small and fragile. Most

A selection of cattle long bones, primarily from meat-bearing part of the body and displaying cut marks linked to the division of the carcass into suitable portions for cooking. Image courtesy of Margaret McCarthy.

excavations either sieve excavated soil on site or take soil samples for sieving later. Even so it is still the case that larger bones will be over-represented in what is found and thereby suggest that more beef, mutton and pork was being eaten by comparison with other meats like fowl and fish than was actually the case.

In her study of animal bones from the Cork City excavations Margaret McCarthy found that 96% of all the recovered mammal bones were cattle, sheep or pig. Of these over 60% were cattle, with sheep at 25%, pig around 10%, and the rest a mixture of goat, horse, dog, cat, red deer, hares and rabbits, squirrel, rodents and seal. Not all of these are related to food production - there is no evidence people in medieval Cork were eating dogs, cats or rodents[29]. It is also a factor that animal parts were used for more that consumption - hides and skins were used in a variety of ways and bone, antler, horn and teeth were all being used in manufacturing various artefacts.

A good proportion of the cattle slaughtered were fully mature animals, some well over four years of age. McCarthy thinks this was because they were not primarily raised for meat, but cows were kept primarily for their milk and bullocks as draft animals especially for ploughing. Judging by the amount of leather recovered from the Cork excavations cattle hides were in demand and probably very little of the animal was not used in some way or the other. They were then slaughtered after their usefulness for these purposes. The same was true of sheep - only about 12% were slaughtered at the optimum age for their meat so most were kept for their wool. Wool production was a major component of the medieval economy and there is evidence of a thriving export business in wool from Ireland at this time. But pigs were kept primarily for their meat as most were slaughtered before full maturity. Suckling pig was a prized delicacy in medieval cork. Unlike cattle and sheep it is probable that some pigs were kept inside the town walls – a damaged tibia from one pig shows that it was tethered.

There is very little evidence from the bones that goats were kept for their meat. Because they are easily confined they were probably kept in the town for their milk - the most likely source of fresh milk in the town was from goats. Goats were also prized for their horns and there was a horn-worker's workshop somewhere around Grattan Street judging by the amount of discarded de-horned goat skulls found in that area.

Goose radius (wing bone) showing fine knife marks associated with the removal of feathers for quills. Image courtesy of Margaret McCarthy.

Cockerel bones; the two to the right have been deliberately pared to a sharp point to receive metal spurs, the sport of cock-fighting being a favourite pursuit during the medieval period. Image courtesy of Margaret McCarthy.

The horse bones found were small in size suggesting ponies were more common in the town than larger horses. There was very little evidence that horse meat was on the menu.

Wild animals were seldom eaten and where they were, red deer and hare were the most common. The bird bones are nearly all from species bred for captivity, mostly hens but geese were also kept and eaten but much less so ducks. Very little wildfowl or songbirds were caught and eaten but the butchered remains of a swan and a heron were found - these birds were often a feature of medieval feasts as a kind of exotic centrepiece. But pigeon, so popular with the monastic community, is absent from the diet of Cork's medieval townsfolk. Two interesting uses of birds were evident in some bones: a goose radius (wing bone) showing fine knife marks associated with the removal of feathers for quills; and two hen talons deliberately pared to a sharp point to receive metal spurs for cock-fighting.

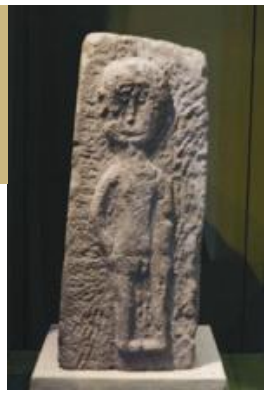
Fish bones were dominated by marine species with hake the most common- hake were very plentiful along the Irish coast in medieval times before being heavily overfished in later times. The hake bones belonged to large fish that would have been caught in deep coastal water using lines. Cod, haddock and whiting were the next three most popular fish eaten in the city. Very few freshwater fish bones were recovered; eel, popular elsewhere in Ireland at this time, appears not to have been very popular in Cork. The animal bones give an insight to the medieval diet of Corkonians; in addition, shellfish, vegetables, nuts, fruit and berries were also an important part of their diet.

The animal bones from archaeological excavations in Cork City show an emphasis on cattle and sheep husbandry in the surrounding rural economy during the 13th and 14th centuries. The meat markets in the medieval town were well supplied with beef and mutton. Horses were bred outside the town and did not appear on its streets until mature enough for working and these were more likely to be ponies. However, animals were also kept for by-products, particularly wool, leather, bone and horn. It was these commodities that made up the bulk of the export trade from the towns - food itself was for local consumption.

Little did the good people of medieval Cork think when throwing these bones into rubbish dumps at the back of their gardens, how valuable these would be, hundreds of years later, as a record of their lives and lifestyle.

ARTEFACT 62

Name: Sheela-na-Gig
Location: Ringaskiddy
Material: Stone
Date: 15th /16th century
Period: Medieval
Size: 40cm x 25cm
Collection: Cork Public Museum



Sheela-na-Gig from Ringaskiddy, now in Cork Public Museum. Image courtesy of Cork Public Museum.

In 1935 the English archaeologist Edith Guest published a survey of Sheela-na-Gigs in Ireland. As part of her survey she visited the Ringaskiddy area in 1934 and 1935 looking for two examples reported to be "in a private garden" in the area[30]. She found neither. In the mid-1980s a Sheela-na-Gig figure "found in the garden of a deserted house near Ringaskiddy" was donated to Cork Public Museum - it is now part of the museum's exhibition on medieval Cork. It is not clear if this figure is one of the pair Guest went looking for in the 1930s or perhaps there was always just the one and this is it. Where the carving originally came from is not known.

Stella Cherry, in her survey of Sheela-na-Gigs from County Cork, describes "this large stone slab with a figure carved on it" as having "a large bald head with small eyes ... set closely together ... the nose is long and a deep incision represents the mouth ... the neck is small and thin and the shoulders rounded ... the torso is long and lean, breasts and ribs are not indicated ... both hands rest on the limbs almost touching the crudely-rendered vulva ... legs are straight and the feet are turned towards each other[31]."

Cherry describes Sheela-na-Gigs as "medieval stone carvings of naked females exposing their genitalia." The origin of the name is obscure and was first recorded in the 19th century. It may derive from *Sighe na gCioch* - old hag of the paps, or *Síle-ina-Giob* - Sheela on her hunkers. Whatever they were called by the medieval masons who carved them, or the people who commissioned them, that name has long been lost[32].

Those examples that are still where they were originally placed must be a clue to their purpose. Nearly all of these are set high-up on the walls of towerhouses (late medieval castles) and churches, all buildings of a 15th /16th century date. A word that comes up frequently in trying to explain their function is apotropaic. This essentially means having the power to turn away evil. This suggests that a Sheela-na-Gig was placed on a castle or church to protect it and its occupants from the Devil, witches, fairies, or whoever or whatever might threaten it. In late medieval Ireland small-scale local warfare was endemic and did not exclude attacks on churches; some late churches were built with battlements and narrow windows for their protection. It is difficult today to see how these figures could possibly be accepted as part of a churches' architecture but that was not the case in late medieval times. Anything that kept a church and its congregation safe from evil and danger was welcome - however gruesome and explicit it was in fact.

Tracton Sheela-na-Gig. Image courtesy of Cork Public Museum.

By the 17th century opinion on these carvings must have changed because the Sheela-na-Gig at Glanworth Castle was then taken from wherever it was displayed on the castle walls and hidden in a small vaulted area, formerly the castle prison. The one example in County Cork that is still in its original position is at Ballynacarriga Castle in West Cork.

There is a second Sheela-na Gig in the medieval exhibition in Cork Public Museum. This was found in a garden on the site of the Cistercian abbey at Tracton, Minane Bridge. There is a possible example on the medieval church at Baile Bhuirne – however, this stone carving is damaged. Cherry is uncertain of its original form and it is one of the station's as part of the rounds ritual. The two other surviving examples from Cork are both in private possession; both are associated with towerhouses - one is at Blackwater Castle, Castletownroche and the other at Aghadoe House, Killeagh.

ARTEFACT 63

Name: Die
Location: Caherduggan, Doneraile
Material: Bone
Date: 13th /14th century
Period: Medieval
Size: 8 millimetres
Collection: National Museum of Ireland

This small die was discovered in 2011 during the archaeological excavation at Caherduggan that was part of archaeological work in advance of road realignment by Cork County Council on the R581 road between Doneraile and New Two Pot House.

The die was recovered from the same well beside Caherduggan Castle that also produced the horse harness and leather shoes featured above (Artefact 57). This die is a square six-

Bone die from Caherduggan, Doneraile. Image courtesy of Rubicon Heritage.

Uneven wooden dice from Cork City excavations. Image courtesy of Cork Public Museum.

Bone die and a bone bead found in the ground floor of Carrignacurra towerhouse during an archaeological excavation at the site. Image by Tony miller courtesy of Shawn and Tom Carlson.

sided cube made of bone and just 8 millimetres in width. Each number is represented by the relevant number of engraved symbols that consist of a dot surround by two circles.

Aside from the fact that it was found with other medieval artefacts in the well, that date is also supported by the non-regular layout of the numbering system. Whereas the vast majority of post-medieval and modern dice are designed so that the opposite faces always total 7 (6 opposite 1, 4 opposite 3, 5 opposite 2) this is not the case with the Caherduggan die. It has a *non-regular* layout, whereby 1 is opposite 2, 3 is opposite 4 and 5 is opposite 6; this arrangement is especially common in dice of the 13th and 14th centuries.

The most common usage for dice in the medieval period was for gaming; games of chance were enormously popular with the Normans. Medieval dice games were very similar to the modern American game of *crap*, whereby bets were taken on the outcome of a number of dice being thrown at the same time. Popular in medieval times was betting on whether the combined numbers shown on the thrown dice were high or low. Modern dice are machine made so the outcome should purely be a matter of chance but this was not always the case in the past. Medieval dice recently found in London were found, when x-rayed, to have tiny drops of mercury inserted so that some favoured a 1 or 2 when thrown, others a 5 or 6[33]. In any case, because medieval dice were hand carved none were exactly regular so one could become familiar with the particular built-in bias of an individual die.

Some dice recently found in Cork City archaeological excavations that are made of wood are clearly uneven in shape and definitely biased when thrown. Among the dice found at the Christ's Church excavation, in three examples the sides 1/2 are largest, and thus the most likely to land up. In the fourth example, the sides 3/4 are most likely to be landed on. In the die from the South Main Street, the sides 1/6 are most likely to land face-up. Testing was done with one example, which found the most probable two numbers on that die had 85% likelihood, or

roughly five out of six throws, to land upward. While it is difficult to prove that any crooked die was intentionally made for cheating, dishonesty was a significant problem in medieval dice games, so much so that laws were made with harsh punishments for those caught cheating.

A die was recently found during archaeological excavation at Carrignacurra towerhouse, Inchigeelagh in advance of restoration work. It is easy to imagine how such a small item could have been lost - the Carrignacurra example, just a centimetre across, was found in the ground floor of the castle where it had probably been trampled into the ground after being lost.

The Cork City excavations also produced a wide variety of gaming pieces, nearly all made of bone but also antler and wood; bone was used to make a wide variety of artefacts but especially combs. The gaming pieces found ranged from pegged pieces, which were stuck into the board, to simple two-sided chips or tokens with or without holes in the middle as well as hand-carved chess pieces.

Gambling was a popular pastime in 13th and 14th century Cork city and county as it is today. Cheating was certainly taking place, especially with dice games. In the age before modern media people had to make their own entertainment and board games were an integral part of medieval life for all ages and groups in society.

Medieval chips or tokens from Cork City excavations (about the size of modern draft pieces). Image courtesy of Cork Public Museum.

Gaming pieces from Cork City excavations. Image courtesy of Cork Public Museum.

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Chapter 11
A Century of Change: Good Times and Bad Times
The Early Modern (Post-Medieval) Period (1580-1690 A.D.)

The Early Modern period in Cork is roughly that time between the Desmond Rebellion (1569-1583) and the subsequent Munster Plantation at the start, and the Williamite Wars (1689-1691) at the end. When the Earl of Desmond went into rebellion in 1569, County Cork was a land of Gaelic and Old English (Norman in origin) lordships, all Catholics. At the end of the Williamite Wars the land ownership was transformed with most of it now owned by Protestants loyal to the English Crown.

The Earl of Desmond had a vast estate in East Cork, which was confiscated after his death, but the plantation of English Settlers did not go exactly to plan, and the entire plantation was destroyed by an uprising in 1598[1]. It took a few years for things to settle down again and for the next forty years Cork experienced a period of relative peace and prosperity. The new English settlers were dominated by one man, Richard Boyle, Earl of Cork, and his enterprising drive certainly created wealth, mostly for the benefit of himself and his extended family, but there was also a trickle-down benefit for the population at large. English entrepreneurs were also active outside the strict plantation lands, developing local industries like fisheries in West Cork and new towns like Bantry and Baltimore. The majority of the county was still in Catholic hands and an uneasy understanding developed between them and the English settlers.

This world exploded in 1641 with the outbreak of rebellion, firstly in Ulster but quickly spreading throughout the country. This was a bitter struggle that took on the mantle of a religious war between Catholic and Protestant. Atrocity followed atrocity; those inflicted on the Protestant population of the county are detailed in the *1641 Depositions*[2]. This is truly the end of Gaelic and Old English Cork with the subsequent Cromwellian campaign (1649-1650) and subsequent land settlement that began in 1653. This was essentially English soldiers being paid for service during the war with farms of land confiscated from the rebels.

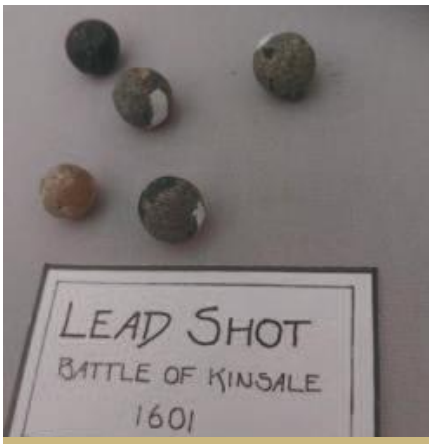
Hardly had things settled down after this but the Williamite War (1689-1691) swept across the country. Then most of what land was left in Catholic hands was transferred to Protestant hands during the Williamite confiscations. But what didn't change during all this time was the nature of the bulk of the general population. There was a fair degree of immigration from England of tradespeople and general workers into Cork during the Munster Plantation, but very little during the Cromwellian and Williamite settlements. Thus the 18th century dawned with nearly all land ownership in Protestant hands but the vast bulk of the population Catholic. This did not immediately lead to widespread trouble; for a time the new land-owning elite were prepared to live at and invest in their new properties, building large country houses and improving their farms.

William of Orange. Drawing by Rhoda Cronin courtesy of Limerick Education Centre.

Returning to the early 17th century we see that urban development was an important feature of Cork's prosperity. This is typified by Bandon, the most important new town built in Munster at this time. It was a walled town that in many ways was a throwback to Norman times, operating under a royal charter granted by James I in 1613. It owed much of its development to its chief patron Richard Boyle, first Earl of Cork. Another town that came heavily under his influence and that prospered was Youghal, an important port catering for shipping on its way to the New World across the Atlantic.

Long established families like the Mac Donagh Mac Carthys of Duhallow are showing their hope in the future by building impressive new houses for themselves like Kanturk Castle. This building is a mixture of old fashioned towerhouse features, notably its impressive machicolations and gun loops, but also new ones; the stone vault is entirely absent - all floors were of wood and the first-floor entrance doorway shows some influence of *Renaissance* neo-classical style. But these fortified houses, like Kanturk Castle, built mostly in the 1620s

Kanturk Castle. Image Courtesy of National Monuments Service, Photographic Unit.



Lead shot from Battle of Kinsale in Kinsale Museum.

and 1630s were a false dawn of renewed Catholic confidence - they were all destroyed or burned in troubles that followed the 1641 rebellion.

This is a recurring theme in the later 17th century and is the main reason we have so few surviving "treasures" from the period. Historic documents; works of art, family heirlooms - all of these rely on continuity for their survival. When castles and houses get burned down so too do their contents. Who knows what was lost in the 1640s when so much destruction of property took place? Chance survivals like the Book of Lismore and the Cloyne Harp are just an indicator of what was lost.

Another tangible reminder of turbulent times are the fortifications built to defend Cork's harbours, particularly the two forts in Kinsale. James Fort was built between 1602 and 1604, directly after the Battle of Kinsale, to cover the entrance into the harbour. The outer defences are largely an earthen construction with five bastions on the angles of a pentagon linked by thick curtain walls. On the other side of the harbour is Charles Fort, built in the 1670s by the Duke of Ormond. This is a *star-shaped* fort covering some 10 acres built to cover the entrance into Kinsale Harbour with a battery of guns. The background to the building of this fort was the Anglo-Dutch Wars that were ongoing at the time. The memory of the Spanish landing at Kinsale eighty years previously was still a strong incentive in terms of defending the south coast against foreign invasion. Both Charles Fort and James Fort are National Monuments in the care of the State and maintained by the Office of Public Works. Charles Fort is the only national monument in Cork with a permanent guide service operated by the Office of Public Works.

The New English in Cork were quick to exploit the county's natural resources, particularly in fishing and timber. Pilchard shoals along the West Cork coast were relentlessly fished for their oil, processed in pressing plants known as *fish palaces*. The great deciduous woods of the western peninsulas were felled to make staves for barrels, timbers for ship building and charcoal for iron smelting and iron working - an important industry developed by Richard Boyle. In farming terms there was renewed emphasis on sheep with wool being a main export of Cork, a lot going to England and then on to the Continent for finishing.

The artefacts selected to represent this period reflect the two main social groups: the old Catholic order that still had the wealth and confidence in the early decades of the seventeenth century to commission artefacts like the Timoleague Chalice and the Cloyne Harp; and the New English Protestants with their penchant for smoking tobacco, eating from Devon plates, and erecting elaborate tombs for themselves. Trade boomed in early seventeenth century

Cork, especially in the busy ports and harbours. Underwater archaeology is revealing aspects of this trade in shipwreck excavations producing exotic cargo like coconuts and olive jars. Coinage had not really taken off in Cork during the seventeenth century - that would happen in the mid-1700s - finds like the German token or *jetson* from Carrignacurra Castle and the very worn silver groat, remind us of the difficulties that faced traders in Cork during the Early Modern period. But war and conflict were never far away and the lead bullets from Kinsale and the Kinsale swivel gun are both reminders of a military past.

ARTEFACT 64

Name: Jetson (Exchequer Piece)
Location: Carrignacurra Castle, Inchigeelagh
Material: Copper alloy
Date: Late 16th/early 17th century
Period: Early Modern
Size: Diameter 25 millimetres
Collection: Carrignacurra Castle, Inchigeelagh

Jetson found during archaeological excavation at Carrignacurra Castle, Inchigeelagh. Image by Tony Miller, courtesy of Shawn and Tony Carlson.

It looks like a coin, but the small disc pictured here is a *jetson*, a counter used in a rather complicated system of calculating commercial transactions. It was discovered recently during an archaeological excavation by archaeologist Tony Miller at Carrignacurra Castle, Inchigeelagh. This is part of a restoration project at the castle by its owners Shawn and Tony Carlson; Shawn is a direct descendant of the Ó Laoghaires who built the castle and hopes that the restored castle will feature in future gatherings of that clan.

Merchants using a counting board and jetson counters to keep track of commercial transactions.

Silver groat from Carrignacurra Castle, Image by Tony Miller courtesy of Shawn and Tony Carlson.

The *jetson* was found beneath a window of the private chambers on the third floor of the towerhouse[3]. It is properly called a *Rechenpennig* and was made by Hanns Krauwinkel II (active 1586-1635), one of the largest manufacturers of these counters in the Bavarian city of Nuremberg. At the centre of this face of the counter is the imperial orb surrounded by a *tressure* (ornamental border) formed of three arcs and three angles and a circle of beads. Around the outer edge is an inscription *GOTT ALLEIN DIE EHRE SETI (To God alone the Glory)*. This warning against the worship of money is typical of religious slogans popularised by the Reformation in Germany.

Throughout the later medieval and into the Early Modern period, jetsons played an important role in the world of commerce. They were used by government officers and merchants for making financial calculations. The word 'exchequer' means a board divided into squares and it was on tables or boards marked out in this manner that jetsons were used to perform calculations. Performing and recording calculations using Roman numerals (X, L, C, etc.) is very slow and cumbersome. The solution was to make calculations using counters on a chequer board. The vertical columns are marked with values, such as pounds, shillings and pence, and the horizontal rows with transaction details. Counters representing the value of each transaction are placed in the applicable squares. To add the value of the transactions, all the counters are moved to the bottom row of their respective columns. This system had disappeared by the 18th century with the adoption of Arabic numerals (1, 2, 3, etc.) and the decimal system.

The vast number of *jetsons* imported from Nuremberg into Britain and Ireland in the 17th century indicates they were used for more than just calculating financial transactions. A difficulty for the economy at that time was the scarcity of small-value coins; mass production of small coins does not take off until the mid-18th century. A solution to this was the use of *jetsons* as a token currency for everyday transactions. This is probably why the design of these small bronze discs assumes the appearance of a coin with a design on each face - the earlier examples are just plain discs.

Carrignacurra Castle was built around 1570 by the O'Leary's as their chief stronghold. By the early decades of the 17th century Gaelic lordships like the O'Learys were being drawn into the commercial world promoted by the English settlers of the Munster Plantation. These planters were familiar with and probably introduced the use of *jetsons* into Cork. But the O'Learys were also using proper coins as shown by the discovery during the archaeological excavation of a silver groat of the reign of Edward IV, dating to the 1470s; its very worn condition suggests it had been around a long time and "would fit in with a construction date of c. 1570 for the tower house[4]."

Before the middle of the 18th century, when small-denomination coins like the farthing were introduced, it was difficult to go to a market stall and buy something small like a loaf of bread. Coins were scarce and usually made of gold or silver, so too valuable to be used in buying everyday items like a loaf of bread. Small shopkeepers had to rely for the most part on credit notes so it not surprising that copper-alloy counters like the Carrignacurra jetson were used as a substitute currency. They looked like coins and were certainly more tangible than a scrap of paper with *IOU* scrawled on it.

ARTEFACT 65

Name: Coconuts
Location: Coconut Wreck, Schull Harbour
Material: Coconuts
Date: 17th century
Period: Early Modern
Size: 30 centimetres
Collection: National Museum of Ireland

Coconuts from the Coconut Wreck, Schull Harbour. Photograph courtesy of Julianna O Donoghue.

In 2012 a previously unknown shipwreck was discovered by Julianna O'Donoghue of Mizen Archaeology during licensed archaeological monitoring on behalf of Cork County Council of dredging works relating to Schull Wastewater Treatment Plant[5]. The shipwreck is situated just east of Colla Harbour near Schull Point in Long Island Channel, Schull Harbour. In the absence of it's true name the shipwreck has been dubbed *The Coconut Wreck*.

Limited but targeted excavation at the site indicates that the wreck is possibly an Iberian caravel trading vessel, dating to 1600-1650 A.D. However, though the wreck has produced Iberian ceramics, coconuts and exotic hardwoods, these objects were in wide circulation in the trading ports of Spain and the West Indies at the time so are not definite evidence that the ship was Spanish or Portuguese.

Seven husked coconuts and a fragment of husk have been recovered from the *Coconut Wreck*. Six of the coconuts are complete while another has been topped with a sharp bladed machete. All the recovered coconuts have a symbol impressed on them that is possibly a plantation mark. The nuts are from the *tall palms* - the most common variety.

Coconuts were an important staple on vessels in the pre-refrigeration era as they remain viable as a food source for up to six months. Furthermore, all of the coconut was used for varying purposes: husk fibres were used to make ropes and mats; the empty shell was used as a cup or a scoop; and of course the nut itself produces *nut-water* and *coconut meat*. They were an important food source for mariners during long expeditions and journeys. An alcoholic drink, *arrack*, can also be made from coconut.

Coconut palms are native to South Asia, Malaysia, and Polynesia. They were first brought from the Indian Ocean in 1498 by the Portuguese explorer and navigator Vasco da Gama. In the 1500's, the Portuguese established coconut palms along the West African coast, the Cape Verde Islands, the coastline of Brazil and eventually the West Indies. Within decades of its arrival its cultivation became widespread in the Caribbean, Mexico and Central South America. Commercial planting of coconut palms began in the mid-l800s and was linked to the abolition of slavery in the British Empire in 1835; in some areas high-labour crops such as sugar cane and cotton were replaced by low-labour coconut plantations.

The wooden finds from the *Coconut Wreck* comprise structural timbers from the fabric of the ship and other individual associated rigging artefacts including a belaying pin, a sheave and a pulley block. The wreck also produced Seville olive jars.

The plantation of English settlers into Munster in the early 17th century brought County Cork and particularly its ports into contact with the wider Atlantic world of the British Empire. It is possible that this wreck was not a Spanish trading vessel but a pirate ship that had plundered these goods from such a boat and there certainly is plenty of evidence for pirate activity along the West Cork coast at this time[6]. The famous *Sack of Baltimore* is a telling reminder of that reality.

A belaying pin, a sheave and a pulley block from the Coconut Wreck. Photograph courtesy of Julianna O Donoghue.

Spanish olive jar from the Coconut Wreck, Photograph courtesy of Julianna O Donoghue.

Contemporary illustration of a caravel.

ARTEFACT 66

Name: Musket balls
Location: Siege Camp, Kinsale
Material: Lead
Date: 1600 A.D.
Period: Early Modern
Size: Diameter 1.5 centimetres
Collection: National Museum of Ireland

Musket balls from Lord Deputy's main Siege Camp, Kinsale. Image courtesy of the Kinsale Battlefield project.

The Kinsale Battlefield Project conducted by Paul O'Keeffe and Damian Shiels has carried out a series of surveys on the sites of the English camps in Kinsale, county Cork, where the siege and battle of Kinsale was fought in 1601 between the English and the Spanish/Gaelic Irish. The Spanish were besieged in the town by an English force based in several camps surrounding the town. Contemporary illustrations, including a magnificent painting now housed in Trinity College Dublin, show the general location of these camps which were surrounded by defensive earthworks. However, on the ground today nothing upstanding survives of these English camps.

One of the aims of The Kinsale Battlefield Project is to exactly locate these fortified camps. This is being achieved by a licensed metal-detection survey issued by the *National Monuments Service* of the *Department of Housing, Local Government and Heritage*[7] ; it is important to note here that it is illegal under the *National Monuments Acts* to use a detection device at or in the vicinity of an archaeological monument or to use one to search for archaeological artefacts, unless licensed. The lead shot in the photo above was found at the Lord Deputy's main Siege Camp. These are in good condition so have probably not been fired; lead bullets flatten on impact. There is no other evidence on the ground for this camp and this demonstrates the importance of artefacts in locating sites of archaeological importance on the ground.

Analysis of some of the bullets showed that they were made on site by soldiers in the camp. These bullets had not been fired, and some of them showed defects in the manufacturing process, probably because they were not being made in ideal conditions but in a muddy and wind-swept camp around campfires where they were dropped in the mud, trampled into the ground and never recovered.

Poorly made and discarded lead bullets from Lord Deputy's Camp, Kinsale. Their small size suggests they were used with a caliver rather than a musket. Image courtesy of the Kinsale Battlefield project.

The principal firearms employed by all sides in the Battle of Kinsale were the *musket* and the *caliver*. The musket was a heavy weapon that required a rest to support its weight when firing, the caliver was lighter and did not require a support. The musket fired a heavier ball over greater distances, but as the Nine Years' War (1594-1603) progressed the caliver became the favoured choice of weapon in Ireland. This was because of its weight; the fact that it was lighter allowed the caliver-men to be more manoeuvrable on the battlefield, a critical necessity in Irish warfare during this period. As a result, one would expect to recover a higher proportion of shot from this weapon than from the musket in Kinsale. This is reflected in the 21 bullets from the Lord Deputy's camp - just two are large musket balls, the rest are smaller caliver balls.

In the end the battle was decided by a cavalry charge by the English army against O'Neill's army who fled in disarray from the battlefield with many massacred as they fled. This was a turning point in the Nine Years War that ultimately led to the Plantation of Ulster, a pivotal event in Irish history.

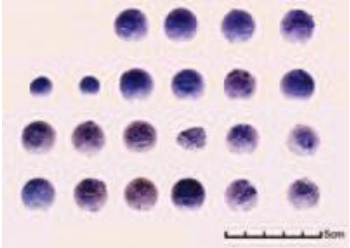
Another site where lead shot was found during an archaeological excavation was at Castledonovan Castle, in West Cork. This towerhouse was built by the O Donovans in the 16th century. The excavation was carried out on behalf of the Department of the Environment, Heritage & Local Government as the castle is now a national monument in the ownership of the State.

In 1650 the O Donovan garrison in the castle was attacked by a Cromwellian force. The historical details of the assault are sketchy, but an assemblage of 28 lead shots from the excavation provides some clues as to events in 1650. It seems that only a small number of the bullets were fired, indicating a minor skirmish and that the castle capitulated quickly before it's destruction. The defender's small amount of ammunition was then abandoned in the castle after the garrison had either fled or surrendered.

These bullets are artefacts that have a story to tell; their analysis can unlock details of violence in the past and bring us closer to understanding the experience of battles and wars in the seventeenth century, events which were often the defining moments of history. The growth of battlefield and conflict archaeology has led to new research that is changing our view of these little objects, and what they can tell us about momentous events in the past.

English soldiers firing caliver guns during Battle of Kinsale. Image by Sara Nylund.

A lead shot as found during the Kinsale Battlefield Project. Image courtesy of the Kinsale Battlefield project.



Lead shot from Castle Donovan. Image courtesy of the Kinsale Battlefield project.

Artist impression of Lord Deputy English camp at Kinsale. Drawing by Sara Nylund.

Artist impression of the miserable conditions in the English camp at Kinsale. Drawing by Sara Nylund.

These two drawings are featured in Cork County Council's Information Map and Guide to the Battle of Kinsale, available on the publications section of Cork County Council's heritage website - www.corkcoco.ie/en/arts-heritage-irish-language/publications-documents-links

ARTEFACT 67

Name: Effigy of Sir Robert Tynte
Location: Kilcredan Church, East Cork
Material: Limestone
Date: 1630s
Period: Early Modern
Collection: Kilcredan Church

Effigy tomb of Sir Robert Tynte in Kilcredan Church. He is lying on the tomb flanked by his two wives, one at his head and the other at his feet, both praying.

In 1926, Philip G. Lee published a very angry "*report*" in the *Journal of the Cork Historical and Archaeological Society* regarding the closure of the Church of Ireland parish church at Kilcredan in East Cork. Dr. Lee was a surgeon in the Victoria Hospital and from an old and prominent Church of Ireland family in Cork City. He was also a long-standing and active member of the Cork Historical and Archaeological Society. He was clearly dismayed when "the church authorities sold the timbers of the floors, windows, and the roof to a builder in Castlemartyr for a trifling sum ... this resulted in complete desecration of the fabric, and demolition of its monuments[8]." Today, what is left of the two monuments that Lee refers to, can be seen at the east end of Kilcredan church. Each one is covered by a metal awning. The church was built by Robert Tynte in 1636 but was extensively rebuilt in the 1830s. It was still in use as a Church of Ireland parish church up until c. 1910.

Robert Tynte was a younger son of an English family who came to Ireland in the early 17th century to seek his fortune. The Munster Plantation had given many such young men who had

East end of Kilcredan Church, with Harris monument on left and Tynte on right.

little chance of advancement in England, the chance to become landowners and men of title in Ireland. Tynte was a soldier and became captain of the plantation militia, in effect a private army run by The Earl of Cork, Richard Boyle, the wealthiest and most powerful of all the English planters in Munster[9]. Tynte married twice; his first wife Phillipa was the daughter of Edward Thomas whose memorial is on the wall opposite Tynte's; his second marriage to Elizabeth Boyle linked him into Richard Boyle's family as she was a distant relation of the Earl[10]. In Kilcredan both wives are part of the memorial, one kneels at his head, the other at his feet. Tynte was Elizabeth's third husband - her first was the renowned poet Edmund Spenser of Kilcolman Castle, Doneraile.

The memorial consists of a chest tomb on which rests the full-size recumbent figure of Sir Robert Tynte clad in armour with his sword by his side; the handle of the sword is still evident. His face is worn smooth and his lower legs are missing. Flanking Tynte, at his head and at his feet, are two kneeling female figures, said to be his two wives Phillippa and Elizabeth; both unfortunately are missing their heads; hands and upper torsos.

View of tomb from behind Sir Robert's head, showing position of two kneeling female figures.

Just the frame and part of two kneeling figures are left of the tomb of Sir Edward Harris, in the north wall of Kilcredan church opposite the Tynte tomb.

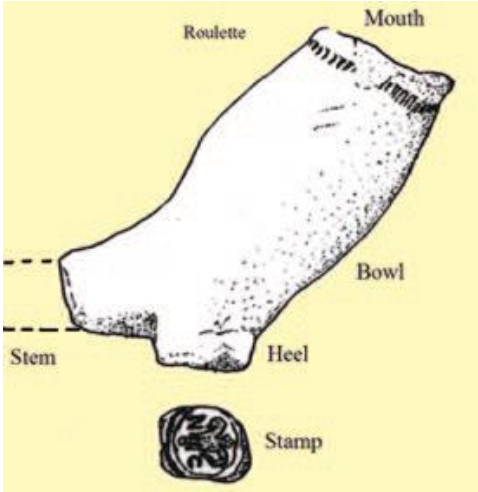
Above the effigy is a square stone tablet, with a commemorative Latin inscription that roughly translates as "here lies the body of Robert Tynte, knight, of the privy council of Munster, fifth son of Edmund Tynte, Esq., of Wrexhall, in the county Somerset, in England, who gained his distinction by the sword. He caused this church and monument to be built, by the providence of Almighty God, in the year of our Lord 1636.[11]" The tablet was set in a classical frame supported by four Ionic columns but none of the columns remain. Above this again is the Tynte shield of arms set in a decorative border. There is also decoration on the face of the sarcophagus on which Tynte rests. In her article on the tomb, Amy Harris shows a rubbing of this which features the Tynte coat-of-arms surrounded by implements of "battle, pomp and ceremony[12]."

As was the fashion of the time Tynte had the monument made whilst he was still alive and probably took much care in how it was designed and how it represented himself and his wives in the sculptures. In this he is following the example of Richard Boyle, Earl of Cork, who had similar, though much grander, monuments to himself erected in St. Mary's church in Youghal and to his wife Catherine in St Patrick's Cathedral, Dublin.

This tomb, now sitting quietly in a remote roofless church in East Cork, is a telling reminder of how the once great and powerful men of the Munster Plantation have long faded from memory into the backwater of history.

ARTEFACT 68

Name: Clay pipe
Location: James Fort, Kinsale
Material: Fired white clay
Date: Late 17th century
Period: Early Modern
Size: Depth of bowl 5 centimetres; diameter 2.5 centimetres
Collection: National Museum of Ireland

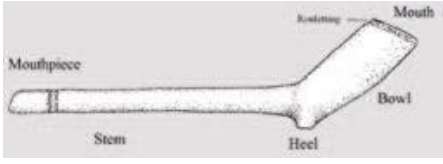


Bowl of clay pipe from James Fort excavation, made in Cork, late 16th century: Stamp on heel has fleur-de-lys and initials NC.

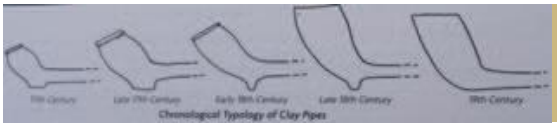
This bowl of a clay pipe was discovered during the archaeological excavations at James Fort, Kinsale, carried out in conjunction with conservation works at the monument by the Office of Public Works[13]. James Fort is an artillery fortification built in the first decade of the 17th century in the aftermath of the Battle of Kinsale to protect the harbour in case of another invasion by a foreign force. It is now a national monument in the ownership of the Department of Housing, Local Government and Heritage.

It is one of 225 bowls recovered during this excavation, as well as 837 stem fragments, but no intact pipe was found. The earliest of the pipes found dated to the early 17th century and are all English made. This is one of two late 17th century pipes from the excavation that is Cork made. Its provenance was identified by Sheila Lane from the heel mark which is stamped with a *fleur-de-lis* and the initials NC[14]. What or whom the initials represent is not known but this stamp is found on pipes from excavations at Dunboy Castle, various sites in Cork City, but also at Lough Gur, county Limerick and King John's castle, Limerick City. It is not found on any pipes elsewhere, so these pipes were not being traded outside Munster.

Clay pipes turn up on most archaeological excavations of seventeenth century sites for two main reasons. Firstly, the material they are made from - fired clay - endures in the ground, and



Main parts of a 17th century clay pipe.



Chronological typology of Clay Pipes

Earliest known illustration of an Englishman smoking a clay pipe- late 16th century.

secondly clay pipes were widely used but easily broken and so thrown away in great numbers. Usually, the bowl is broken away from the stem. In his archaeological excavation at Dunboy Castle, 1967-1973, Eddie Fahy found 336 fragments of clay pipes, 52 bowls and the rest, stems[15]. Fragments of clay pipes also turned up in numbers in nearly all the Cork City excavations[16].

The Native American custom of smoking a peace pipe with tobacco had been observed by Europeans from the first contacts but it is only in the second half of the 16th century that pipe smoking was taken up in Europe. The English played a major role in this introduction and by 1600 A.D. the habit was widespread in the country. There is a Cork connection here with the tradition that Sir Walter Raleigh was the first to bring *Virginia* tobacco into Europe via Youghal. Certainly, by the early 17th century Virginia tobacco was being imported into Cork, Youghal and particularly Kinsale[17] .

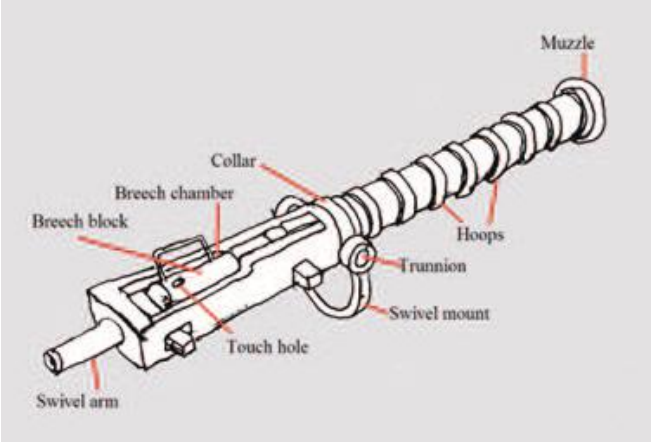
The first pipes were made of a variety of materials, but quickly it was realised that fired white clay was the best material for their manufacture. By the end of the 16th century specialist pipe-makers were mass producing pipes using moulds to fashion the clay. White clay pipes rapidly spread across northern Europe during the early 17th century and to colonies all around the world. The clay pipes continued to form the most frequently used medium for smoking tobacco until late in the 19th century when cigars and cigarettes took over the market. Clay pipes are one of the first truly disposable commodities on the market being quick and easy to make from a cheap and easily available raw material but also easily broken and so in high demand.

ARTEFACT 69

Name: Swivel gun
Location: Kinsale Harbour
Material: Wrought iron
Date: 16th/17th century
Period: Early Modern
Collection: Kinsale Museum

Wrought iron, breech-loading swivel gun in Kinsale Museum.

In Kinsale Museum is this important example of a wrought iron, breech-loading swivel gun. The museum's records indicate that it was recovered from the harbour and it is a well-preserved and very fine 16th/17th-century example of these quick-firing, anti-personnel cannon. The Kinsale gun is more or less intact. Its barrel with seven hoops or reinforcement rings has a flat *muzzle*. Its two *trunnions* are fixed into the *swivel mount* or yoke and kept in place by the *trunnion band* around the gun. Below the *trunnions* the *collar* is present that houses the end of the barrel of the gun. The *breech chamber* extends from the collar and it was into this that the *breech block* was positioned. The block contained the gun powder and was primed in advance of insertion, with *touch hole* facing upwards to permit ignition. The *breech block* has one handle to ease insertion into the *breech chamber*.



Parts of a breech-loaded swivel gun.

Unusually, the Kinsale gun has an iron breech block cover with additional handle. The iron *locking wedge* is still intact at the rear of the breech chamber, which holds the *breech block* tight against the barrel to assist detonation and firing. A strap or *breech 'sling'* forms part of the breech chamber underneath and which prevents the breech block from falling out. The tiller or *swivel arm* that extended from the chamber at the rear of the gun appears to be missing, possibly broken off in antiquity though some early swivel guns did not have these extensions. The tiller facilitated ease of movement when lining up the gun in advance of firing.

The gun would originally have been fixed onto the gunnels or handrail of a ship. Swivel guns had various names. Due to their manoeuvrability, swivel guns were favoured small ordnance pieces on board ships, especially for close combat.[18] The gun appears to be a 3-pounder, meaning it fired 3-pound cannonballs, usually of stone, which were inserted into the rear of the barrel, within the collar, before the primed breech block was placed into the chamber.

These guns can have a long use period, and therefore a long date period, right into the 18th century due to their usefulness on board a ship. The Kinsale gun is linked with the Spanish presence in the town in 1601 during the Battle of Kinsale. Certainly, it could have formed part of the ordnance from that time in one of the English or Spanish ships, though this cannot be said definitively as other ships using the harbour, including merchant ships, carried similar armaments. It could have been lost overboard or jettisoned, or indicate the presence of a wreck on the seabed in the harbour awaiting discovery.

Kinsale Museum too houses significant archaeological material related to events that took place in the harbour in times past. Kinsale of course was a busy port and its maritime importance is evidenced by the strategic placement of the two bastion forts at its entrance - Charles Fort and James Fort. These fortifications, now *national monuments*, were built to command and control the harbour and still stand today overlooking boats and ships entering and leaving Kinsale.

What can be said with certainty is that the swivel gun in the Kinsale Museum collection is a significant artefact that reflects a time when Kinsale Harbour was a vibrant, maritime port that accommodated armed vessels. These ships may have been involved in general trade or in transport of people overseas to the colonies; it may have been a ship involved in piracy which was rife along the Cork coast during the late-16th and early-17th centuries. It could also, of course, have been on board a ship engaged in conflict, in seminal events like that of the Battle of Kinsale, events that ultimately changed Irish history.

Selection of cannon balls in Kinsale museum.

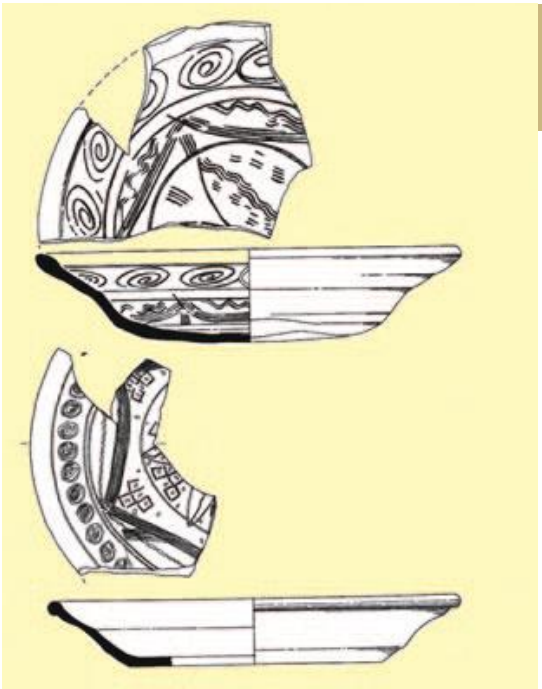
ARTEFACT 70

Name: North Devon Gravel-tempered Sgraffito Wear
Location: Dunboy Castle, Castletownbere
Material: Ceramic
Date: 17th century
Period: Early Modern
Size: Complete plates 30-40 centimetres in diameter
Collection: National Museum of Ireland

North Devon Sgraffito Ware plates from Dunboy Castle excavation.

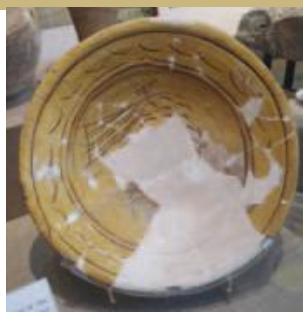
The illustration above shows three broken plates of North Devon *Sgraffito Ware* found during the archaeological excavation at Dunboy Castle[19]. Sherds of broken pottery like this are one of the most common finds on archaeological excavations for two basic reasons. Firstly, ceramic vessels are easily broken and when broken, useless, so thrown away. And secondly because pottery made of fired clay survives very well in most ground conditions. It was not surprising therefore that the greatest quantity of finds at Dunboy were sherds of pottery.

Dunboy Castle was built by the Ó Sullivan Bere family in the 15th century and is best known for events there in 1602 when a Spanish garrison was besieged and defeated by an English



Two dishes of North Devon sgraffiro ware found in the Grattan Street archaeological excavation in Cork City.

Typical North Devon Sgraffito plate from a Cork city excavation on display in Cork Public Museum. The typical body of the plate is yellow with the sgraffito decoration a dark brown. Image courtesy of Cork Public Museum.



force - events that are linked to the Battle of Kinsale (see exemplar 23 in *Heritage Castles of County Cork*, a previous book in this series.)

The pottery found at Dunboy during the excavation came from far and wide, reflecting Dunboy's location on the coast with links abroad and the events of 1602 when occupied by a Spanish garrison. The pottery came from England, France, Germany, Holland, Spain, Portugal, Italy and China. Amongst this array were our three plates from North Devon.

A large-scale export trade in pottery goods was developed in the North Devon towns of Bideford and Barnstaple in the 17th century[20]. A considerable quantity of this pottery was exported to Cork from 1620 up to a peak in the 1680s and 1690s, most of it plates and dishes. A distinctive feature of this pottery is the use of gravel temper slip and sgraffito patterns in its decoration, and hence this pottery is often referred to in general as *North Devon Gravel-tempered Sgraffito Wear*. These were made by applying a white slip to the plate's surface. The plate was then decorated with an incised pattern - this method of decoration is called sgraffito - and then fired so that the slip came out yellow and the incised sgraffito pattern brown.

This pottery links County Cork with a booming trade in pottery goods imported into the city and county during the 17th century from the Southwest of England. Most of the English colonists who settled in Cork as part of the Munster Plantation came from that area so it is not surprising that they favoured eating off plates from there. But the amount of that pottery found throughout the county shows that it was also popular with the native population and good enough also for meals in the Ó Sullivan Bere castle at Dunboy.

ARTEFACT 71

Name: Gun money
Location: Ballyvinny South, Glanmire
Material: Brass
Date: 1690 A.D.
Period: Early Modern
Size: Diameters: 4 centimetres – 2 centimetres
Collection: National Museum of Ireland

Gun Money.

These coins and others like them were discovered during an archaeological excavation at Ballinvinny South, Glanmire, in advance of the N8 road scheme[21]. The excavation revealed the foundations of a late 17th century settlement with houses and outbuildings built on the site of a long-abandoned medieval moated site; this is a very rare example of such a settlement. Concealed in the floor of the largest building, which was once a large timber-framed dairyman's home, was a hoard of 67 coins dating to 1689 and 1690 A.D. Analysis showed that the coins had been wrapped in cloth. The hoard consisted of 7 half crowns, 27 shillings and 33 sixpences. The coins are of a type commonly termed *brass money* or *gun money* and they

connect this humble dwelling in Ballinvinny South to the desperate struggles of a king.

Having been forced out of England by the Protestant usurper William of Orange in 1688, James II fled to Ireland in an attempt to reactivate his flagging cause. In dire straits financially and desperate for funds to finance his war efforts, James decided to produce a coinage in base metal to pay his way. In June 1689 he ordered the minting of copper and brass coins as legal tender with a promise to the holder that they would be redeemed in gold and silver once James reclaimed the English throne.

Gun barrels, cannons, church bells and scrap metal was used to produce this new coinage, hence the name *gun money* or *brass money*. The coins - half-crowns, shillings and sixpences, were issued in substantial numbers, from mints at Dublin and Limerick. Probably with a view to their later redemption, they carried not only the year of issue (1689 or 1690) but also the month of issue.

These new coins were designed with the bust of James II and the legend *IACOBVS II DEI GRATIA* (James II by the grace of God). The reverse side had the King's royal crown symbols, his initials (J R for *Jacobus Rex*, James the King) and the value of the coin denoted in Roman numerals. These were surrounded by the inscription *MAG BR FRA ET HIB REX 1689* (Great Britain, France and Ireland King 1689).

The need for coinage and metal was incessant with some estimates stating he required thirteen tonnes of copper per month for coin production alone. To supply this need, the country was scoured for old cannons, church bells and even old kitchen pots and pans, in order to make these coins.

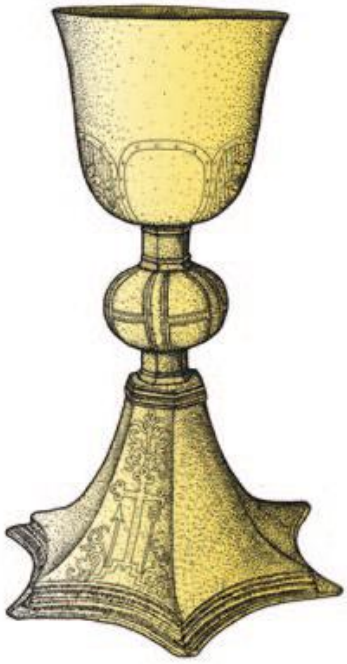
Gun money was extremely unpopular with merchants and traders throughout Ireland and of course with the unfortunate troops who received it as their pay. After William's victory they became useless and as they were made from base metal there was no point in hoarding them or even melting them down as they had no bullion value. Consequently they were simply dumped and have been found in hoards like this one in Ballyvinny ever since.

As a failed monetary system, gun money influenced the foundation of the Bank of England in 1696, and the issuing of paper money and bonds redeemable from central reserves. The defeat of James and the collapse of gun money left his supporters in Ireland destitute, and bitter. The Irish term for gun money was *uim bog (soft money)*, which would be immortalised as 'humbug' by Ebenezer Scrooge in A Christmas Tale.

Artist's impression of the farmstead at Ballyvinny South where the hoard of gun money was found.

Artefact 72

Name: Timoleague (Dale-Browne) Chalice
Location: Timoleague Friary
Material: Gilt silver
Date: 1600 A.D.
Period: Early Modern
Size: Height 20.4 centimetres;
diameter of bowl: 8.1 centimetres;
width of base 1 3.9 centimetres
Collection: National Museum of Ireland



The Timoleague (Dale-Browne) Chalice. Drawing by Elaine Lynch.

The Timoleague (Dale-Browne) Chalice, pictured, is a beautiful gilt silver artefact made by a Cork silversmith around 1600 A.D. for Charles Daly and his wife Elizabeth Browne for the Franciscan Friary in Timoleague. These were delicate times for Catholics trying to practice their religion in Cork with all the restrictions the Reformation had imposed on them. At a time when silversmiths were beginning to hallmark and sign their work it is telling that there are no such marks on the Timoleague Chalice; whoever made it was a very skilled craftsman but aware of what trouble might come his way if too closely associated with making a holy vessel for Catholic mass. Chalices are holy vessels and have always been treasured by the Irish church, as amply demonstrated by masterpieces like the Ardagh and Derrynaflan chalices.

The Franciscan Friary, Liberty Street, Cork, became the repository for a remarkable collection of seven silver communion vessels, all made in Cork between 1600 and 1684[22]. Six are chalices and the seventh is a ciborium; a chalice is used to hold wine during mass and a ciborium is a vessel with a lid for storing Eucharistic bread.

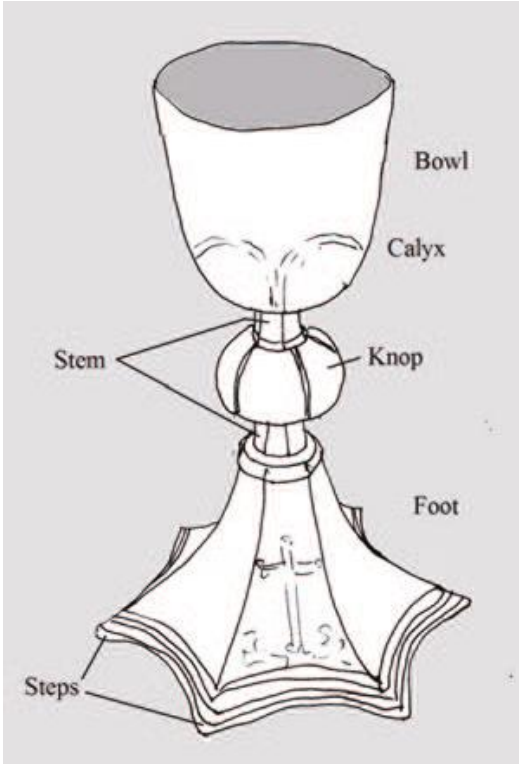
All seven vessels have an inscription in Latin that securely date their construction and provenance. The Timoleague inscription is as follows: ORATE PRO ANIMABVS CAROLI DALE ET ELIZIE BROWNE, TIMOLEAGVE (pray for the souls of Charles Daly and Elizabeth Browne, Timoleague). The style of the chalice is almost identical to the Buttevant (Sinan) chalice which has the date 1600 engraved on it so the Timoleague Chalice is around the same date.

The Franciscan friary in Timoleague was founded in 1316 and was suppressed in 1568 as part of the Reformation. When Friar Donatus Mooney visited Timoleague in 1617 he noted the damage to the friary caused by Puritan zealots in the previous century, including the shattering of its stained glass windows and the destruction of its paintings and statues. However, by that stage the friars had returned and partially rebuilt the friary under the protection of the local lords, the Mac Carthys, and with financial assistance from wealthy Catholics like the Dalys. It is likely that the chalice was a gift from the Dalys to the friars on their return to the refurbished

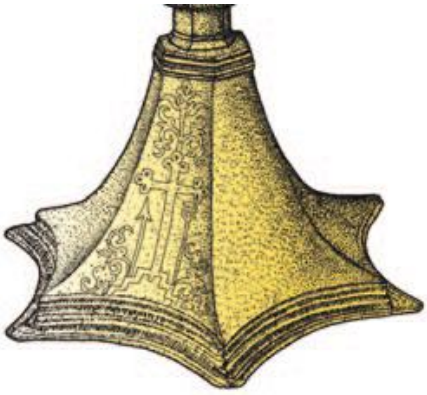
friary and no doubt the friars remembered the couple in their prayers. The friary is now a national monument in the ownership of the Department of Housing, Local Government and Heritage and maintained as a visitor attraction by the Office of Public Works[23].

The Timoleague chalice is made of gilt silver and is very similar to the other five Cork chalices with "a deep bowl constituting an engraved calyx of six sepals, a hexagonal stem, a knop with vertical flutings, and a tall hexagonal foot with incurved angle and base lines[24]."

The main decoration on the chalice is on one of the facets of the foot. This consists of a cross rising from three steps and surrounded by the *Instruments of the Passion*: a spear on one side and a stick with a sponge on the other; the Franciscans had a strong affinity with the *Passion of Christ* and this decoration further underlines that connection. The cross itself is represented as the *Tree of Life* with shamrocks at the ends of its arms and on top and with branches sprouting from its head and base.



Parts of a typical Cork chalice.



A close-up of the detailed base of the Timoleague Chalice. Drawing by Elaine Lynch.

The Coleman-Gould Chalice (1639 A.D.)

The five other Cork chalices are all linked to Franciscan Friaries, one with Buttevant Friary; one with Youghal Friary, and the other three with Cork Friary. Their style is conservative by contemporary continental styles and follows closely the medieval form of a chalice. The most elaborate is the Cork example, known as the Coleman-Gould Chalice, which has an inscribed date of 1639 A.D. Its bowl is gilded with gold on the inside and the calyx and knop have applied openwork with floral patterns. All six facets (sides) of the foot have engraved scenes. These are the Crucifixion, Saint Francis of Assisi, the Virgin Mary, Saint Clare, Saint Elizabeth of Hungary, and Saint Anthony of Padua. These have been described as providing "a short lesson on the early history of the Franciscan Order ... the choice of saints also reflects the devotion to these particular saints already established in late medieval Ireland[25].'

In the early 17th century in County Cork there were enough wealthy Catholics to commission fine works of art for their local Franciscan Friary in the form of communion vessels, particularly chalices. The conservative form of the chalices, conforming to the standard medieval prototype, and the religious emblems and symbols engraved on them show a conservative Catholicism very much still embedded in its traditional modes of worship and belief.

The chalice is on display in the National Museum.

ARTEFACT 73

Name: Silver mug
Location: Cork
Material: Silver
Date: 1693 A.D.
Period: Early Modern
Size: Height 10.35 centimetres
Collection: National Museum of Ireland

Silver mug by Charles Begheagle, Cork, 1693. © National Museum of Ireland.

This drinking mug is an extremely rare example of 17th century Cork silver. It was made by Charles Begheagle, a Protestant who fled persecution in France following the Revocation of the Edict of Nantes in 1685 by the Catholic King of France. Begheagle belonged to the Huguenots, a strict sect of Calvanists. He is believed to have been encouraged to settle in Cork by fellow Huguenot, the goldsmith Robert Goble. Begheagle became Warden of the Goldsmith's Guild of Cork in 1693 and died in 1697. Hardly any of his works survive. He favoured repousse chasing of silver in his work; repousse is where the decoration is hammered out from the inside and chasing where it is hammered

Cork City hallmark based on its coat of arms - a ship between two castles.

from the outside - both techniques are often used on the same piece. There is a possibility that he may have made the Cork Mace, attributed to his friend Robert Goble, now at the Victoria and Albert Museum in London. This mug is now a prized possession of the National Museum of Ireland Decorative Art and History collection, in Collins Barracks, Dublin.

The repousse-chased design on the bowl has four panels, each with children in a rural setting representing each of the four seasons. The bowl bears the maker's mark CB and hallmarked as Cork Silver and the date 1693. The introduction of hallmarking in 1637 was the first quality control system introduced for consumer goods to maintain standards and prevent fraud. When a silversmith finishes creating an item of silver it is sent to the assay office to ensure the metal used is 92.5% solid silver and after verification and tax duties paid the relevant punch or hall marks are impressed onto the silver.

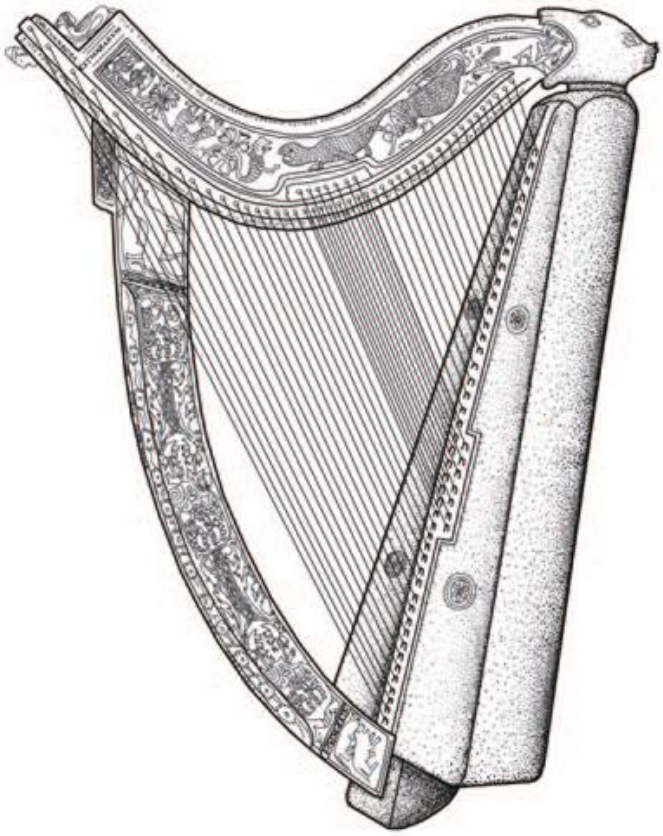
The reason so little secular silver from 17th century Cork survives is that the wars and rebellions of the time destroyed so much. No wealthy family in the county was still living undisturbed in the same house at the start and the end of that century. Another reason so few silver artefacts survive is also because of what they are made from - a precious metal. Before valuable objects were valued as antiques, they were valued just for the amount of gold or silver they contained. For example, the Earl of Orrery, a very wealthy man, had a great dinner service made, embossed with his coat-of-arms. But after his death his widow shipped the lot off to London for auction. It was bought by a Dublin goldsmith and promptly melted down to make a new range of silverware in a more modern style.

This silver cup is therefore a valuable and rare survival and is an insight into the world of Huguenot Cork and silversmithing in Cork in the late 17th century.

ARTEFACT 74

Name: The Cloyne Harp
Location: Cloyne
Material: Yew wood
Date: 1621 A.D.
Period: Early Modern
Size: Height 1.2 meters; Width 0.9 meters
Collection: National Museum of Ireland

A remarkable musical instrument was made in East Cork in the 17th century. Nothing else like it has survived and it is unique in many ways: a very unusual harp that has long puzzled historians and musicians. A complex decorative scheme covers the entire body of the instrument; and it bears a long and detailed inscription that is a mini-history of life in an Early Modern Gaelic household. Everything about this instrument is wonderful.



The Cloyne Harp. Drawing by Elaine Lynch.

The *Cloyne Harp* survives in two parts, the *neck/harmonic-curve* and the *fore-pillar*. The third part, the *sound-box* was lost a long time ago. It has two other names - the *Dalway Harp* and the *Fitzgerald Harp*. The first of these names is because it had long been in the possession of the Dalway family of Carrickfergus, Co. Antrim. The second because an inscription on the harp records that it was made in 1621 for Sir John Fitz-Edmond FitzGerald of Cloyne, County Cork. It is now in the collection of the National Museum of Ireland where it is called the *Cloyne Harp*.

Both the neck and the fore-pillar are inscribed and elaborately carved and appear to be made of yew. The design is very unusual. At one end of the neck is a dog's head, mouth opened.

Neck of harp: dog's head on far right; queen on far left underneath; part of inscription runs along base of neck.

From this flee a number of mythical beasts. At the other end of the neck, on its under-surface, is a queen carved with her head in high relief like a ship's figurehead. She is wearing a crown and holding a sceptre and orb.

The front (outward) face of the fore-pillar has the date 1621 at the top. Below this is the royal arms and beneath that the impaled (combined) arms of Sir John FitzEdward Fitzgerald and his wife Ellen Barry. Below this again are three panels of interlaced floral patterns. The remaining surfaces are similarly filled with decorative panels, most with similar interlaced floral patterns, but some with animals, and there are also panels with inscriptions.

The inscriptions are in Irish and Latin and are extensive. The main Irish inscription is roughly transcribed as follows:

These are they who were servitors to John Edmund at Cloyne when I was made: The steward was James fitz John, and Maurice Walsh was our superintendent, Dermot fitz John wine butler, and John Raudham beer butler; Philip fitz Donnel was cook there, A.D. 1621. Teig 0 Ruairc was chamberlain there, and James Russell was house-marshal; these were all discreet attendants on him. Philip fitz Teig Magrath was tailor there. Donnchadh fitz Teig was his carpenter. It was

Queen on neck of Cloyne Harp.

Front face of fore-pillar

Replica of Cloyne Harp in Ballymaloe House.

he that made me. Giolla-Patrick MacCrudan was my musician and harmonist, and if I could have found a better, I have. Dermot MacCredan along with him two highly accomplished men whom I had to nurse me. And may God have mercy on them all[26].

The harp also proudly proclaims in Latin: EGO SUM REGINA CITHARARUM (*I am the Queen of Harps*).

Sir John FitzEdward Fitzgerald lived in the towerhouse at Ballymaloe and the inscriptions on the harp give us an intriguing insight into his household there - this included a superintendent, a butler, a wine butler, a beer butler, a cook, a chamberlain, a house-marshal, a tailor, a carpenter and a harpist. This gives a clear indication that entertainment and feasting were still a very important part of the role of a local grandee like Fitzgerald – a tradition continued today at Ballymaloe House.

The soundbox has disappeared and probably owes its demise to the destructive stress produced by its 52 strings; it is liable to have suffered badly as a result of string-tension. The harp is unique in that it had seven mysterious extra strings, whose tuning pins are positioned just above the main row, near the centre. Scholars and performers alike are intrigued by them and several theories have been put forward to explain their purpose[27].

The harpist was always the highest status musician in ancient Gaelic culture, "expected to be able to play music to bring on tears, to bring on joy, and to bring on sleep[28]." However, by the 17th century the position of the harper was changing. An indication of this was the abandonment of the traditional way of playing by plucking the strings with the fingernails. Instead the strings were now plucked with the finger. A number of factors may have combined to bring about this change. Harpers could no longer be guaranteed upkeep by a local lord as the old Gaelic order began to crumble under financial and political pressure. Many harpers were forced into manual work - not conducive to maintaining long fingernails. But also fashion in playing stringed instruments was changing under influence from abroad and playing with fingernails began to look very old fashioned. As well, musicians in the 17th century had to be more flexible and be able to play more than one instrument and long fingernails were an impediment to this. Harps themselves were also changing becoming smaller, lighter and easier to play.

The *Cloyne Harp* therefore marks the end of a long tradition in Gaelic society where the harper was a professional dedicated to a single instrument performing in the great hall and private rooms of his lord and master. By the 17th century their preeminent status as the queen of instruments was also being overtaken by keyboards and fretted instruments more suited to the type of music now being played. Change was coming to Cork and Ireland and things would look very different for everyone including the harpers in the new world of the 18th century.

A handsome life-sized replica of this historic instrument can be seen at Ballymaloe House. The Allen family commissioned a modern playable *Ballymaloe Harp* which can be heard there on occasions; it is constructed from elm grown on the estate.

ARTEFACT 75

Name: Bandon Mace
Location: Bandon Town
Material: Silver
Date: 1700 A.D.
Period: Early Modern
Size: Height 1.2 metres
Collection: National Museum of Ireland

The Bandon Mace is one of the masterpieces of early Cork silver. It was made around 1700 A.D. by the Huguenot silversmith Robert Goble for Bandon Corporation. It has been described as "highly decorated and carrying a considerable amount of inscribed information" making it a historical document in its own right[29]. The mace has "a total length of three feet ten and a quarter inches and weighs forty-four ounces[30]."

The mace was carried in procession to St Peter's Church, Ballymodan, whenever the Corporation assembled there. Until the early 20th century the mace was kept in Saint Peter's Church but was then given to Lord Bandon of Castle Bernard, in his role as Sheriff of Cork for protection and safe keeping, having been stolen from the church and recovered on a number of occasions. The mace remained in the possession of the 5th Earl of Bandon, Percy Bernard, until his death in Cork in 1979. The Earl was an Air Chief Marshall in the RAF and carried the mace around the world as a regimental emblem. After his death the mace was placed in the National Museum of Ireland where it is on display in the Irish Silver Collection at Collins Barracks, Dublin.

We have already met Robert Goble (Artefact 73) in conjunction with his fellow Huguenot silversmith Charles Begheagle. In the aftermath of the Williamite Wars, Cork experienced a period of relative peace with a growth in towns and municipalities. The bodies

Bandon mace, Cork, circa 1700; mark of Robert Goble.

that ran these, like Bandon Corporation, were now in the market for civic regalia like maces, civic swords, drinking cups, beadle's staffs and freedom boxes. These were required to embellish the assemblies, dinners and other formal functions held by the corporations. Silver was the favoured metal for most of these pieces so that silversmiths like Goble and Begheagle were much in demand. These Corporations had a strong sense of their own authority and many operated under their own individual charters. Displays of pomp and ceremony were part of asserting that power and independence and the town's mace often became a symbol of that identity and a source of pride to the town's people.

Robert Goble was a prominent member of the Cork guild of goldsmiths and silversmiths established in 1656 by Cork Corporation[31]. Amongst his civic works is the long oar used in the ceremony of *Throwing the Dart*, a ceremony signifying the Corporation's authority over the port. He also is credited with the Cork Mace now in the Victoria and Albert Museum in London, a replica of which is in Cork Public Museum.

The mace has its origins in medieval pageantry when a king's sergeant-at-arms carried the mace as a weapon in the royal bodyguard. Medieval maces were formidable weapons made of iron, twelve to eighteen inches long, with sharp spikes to pierce armour. However, by the Early Modern era that military role was past and maces became symbolic artefacts carried by a mace-bearer before a dignitary to signify the authority of that person's office. Mace carrying has become less common as civic ceremonies and occasions are less formal and most are now kept in museum collections like the *Bandon Mace*. There has been very little research done on these magnificent pieces of early Cork silver and they surely deserve more attention.

ARTEFACT 76

Name: Bandonbridge Farthing
Location: Belvelly Castle, Great Island
Material: Copper alloy
Date: 1645-1647 A.D.
Period: Early Modern
Size: Size 8 millimetres x 10 millimetres
Collection: Belvelly Castle

The most notable artefact found during the archaeological excavation by Dan Noonan at the late medieval towerhouse of Belvelly Castle, the Great Island, Cobh, carried out in conjunction with restoration work at

The 'retrograde B' image on the the Bandonbridge farthing. Photograph by Dan Noonan courtesy of Anne and Garry Wilson.

The three-turret emblem on the reverse side of the Bandonbridge farthing.

the castle by its owners Anne and Garry Wilson, is this token known as a *Bandonbridge Farthing*. This rare artefact is a small copper alloy token, cut to a diamond shape. On one face is a *retrograde B*, mirror-image of a double B, standing for *Bandonbridge*, the name of Bandon town in the 17th century. On the other side is a three-turret castle representing the town's insignia. These tokens are a local coinage minted in Bandon in 1645-1647 on the orders of Lord Broghill, a prominent landowner in the town. The farthing was uncovered in one of the upper chambers of Belvelly Castle. The date of the farthing fits well with the last time the castle was occupied as a residence by Sir Peter Courthope.

Courthope was one of the many Englishmen who settled in Cork during the early 17th century as part of the Munster Plantation, a project by the English government to establish a loyal Protestant population in Munster. This world was shattered by the outbreak of rebellion in 1641 that led to years of unrest in Cork and throughout Ireland, much of it fuelled by religious strife.

By 1645 A.D. isolated rural communities, on both side of the divide, were vulnerable to attack. Bandonbridge had been established as a Protestant bastion during the Munster Plantation - a town secure behind its surrounding wall. It was natural therefore that it became a refuge for the surrounding rural Protestant population when the countryside became unsafe. The other walled towns in the county – Cork City, Youghal, Buttevant and Kinsale, also became Protestant refuges and were effectively besieged by a resurgent Catholic population.

During this prolonged period of civic breakdown people still had to live their lives and earn their living; and commercial activity, at some level, had to continue in the shadow of war. One of the solutions to this problem, which both sides applied, was to issue a token coinage. The coinage is token because at this time a coin was valued at its bullion (weight) value, be it silver or gold. But a coinage issued in a base metal, like copper alloy, what was its value? It was all a question of traders and their customers accepting the token at its presumed value rather than its actual value. In Bandon they had to trust that Lord Broghill who ordered these novel coins to be minted could guarantee their assumed value when things returned to normal. A similar situation existed in Cork, Youghal and Kinsale - all these towns issued their own token coinage - known popularly as *siege money* because all these towns were effectively under siege. The entrepreneurial spirit of Bandon in the early 17th century shines through in the

minting and use of these tiny *farthings*. Bandon, Buttevant and Youghal in Cork County, as well as Cork City itself, are members of the Irish Walled Town Network today.

Even after some semblance of normality returned in the later decades of the 17th century, coinage remained a problem, particularly in the lower denominations. English, Irish, French, Portuguese, Spanish and Dutch coins were all circulating in 17th century Cork, especially in its port towns, and traders were often bewildered by the variety of coinage they had to deal with. The country did not have a unified coinage until 1822 when standard British coinage was put in use throughout the Kingdom.

Coins come in all shapes and sizes and were issued under a variety of circumstances by Kings, Nobles, Parliaments and Corporations. For most of history a coin was worth its bullion value in gold or silver. Accepting coins like *siege money* or *gun money* was a risky business for traders and customers in 17th century Ireland when their true worth depended on the outcome of history.

Did Sir Peter Courthope or one of his retainers take refuge in Bandon in the mid-1640s and acquire this token as part of a trade or bargain? In whatever manner it came to Belvelly, this tiny artefact was lost and its story forgotten until Anne and Garry Wilson decided to restore the castle and it was found. It is now part of the story of the castle.

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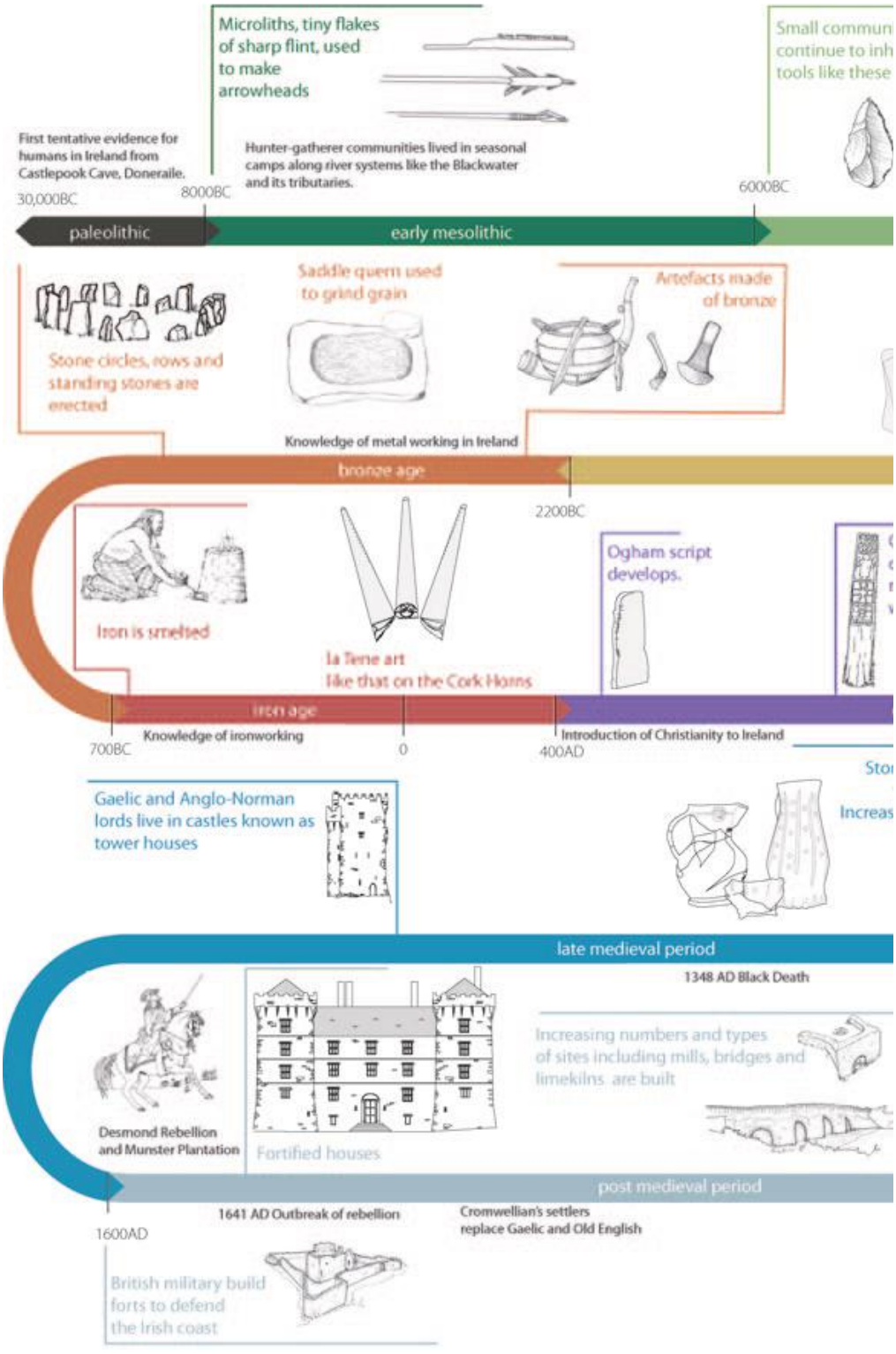
Chapter 12
A More Familiar World
The Eighteenth, Nineteenth and Early Twentieth Centuries

This final chapter covers a period which we think of as reasonably familiar to us - the more recent past. As we move faster and faster into an ever-changing future even the recent past can seem remote and distant. Things get left behind very quickly and before long we hardly know what many objects were used for. Take the rapid development of computers, the floppy disc that as recently as the early 1980s seemed at the very cutting edge of modernity is now a relic of redundant technology. Is it not now an archaeological artefact in the sense that it is part of the past, redundant and its story fading from memory? The 18th and 19th century witnessed similar changes resulting in a vast array of artefacts, some of which are still used and valued but others have become redundant, lost or left to decay.

In the eighteenth century, with the Industrial Revolution, the mass production of artefacts becomes a feature of everyday life. Not everybody could afford all that was being produced but even the poorest saw their lives being impacted by technological change. By the nineteenth century, towns had shops displaying a wide array of goods, marketed to all walks of life; clothes made from cloth produced in a factory rather than a back-room loom; all sorts of new gadgets for gardeners and farmers; fancy imported goods from all over the world. A lot of these artefacts were well-made and going to last, some were valued, others quickly discarded. Many of the horse-drawn rakes made by Pearce Foundry in Wexford are still lingering in farmyards more than a century after they were last used. At what stage do these things go from being common junk to something for a museum? This is where local museums play an invaluable role.

The interest the people of Cork have in their recent past is clearly manifested in the county's many local museums. The National Museum of Ireland has a large collection of artefacts from the 18th, 19th and 20th centuries and many of them are on display in their museums but there is also a role in the wider museum world for local museums focusing on their own areas or particular aspects of local heritage. These museums have played an invaluable role in preserving important modern local heritage artefacts from their own areas that otherwise would be lost. They have provided a safe place for these treasured artefacts where people can visit and enjoy learning about the past. They display a vast array of material and are a real treasure trove of information. Local museums are nostalgic places to visit, bringing back happy memories for many, while at the same time allowing us to see again the benefits of living in the comforts of the 21st century. In the present decade of commemoration, the role of the local museum has really come to the fore, with sites listed here holding artefacts vital to the understanding of early 20th century conflict. For these reasons it has been decided to feature the museums in this chapter as places to visit and explore the 18th, 19th century and 20th century array of artefacts, because it is here the story of Cork's recent past is being told.

By highlighting the county's impressive group of museums, we hope to encourage people to visit these places and enjoy what they have on display. As a taster, we feature a selection of artefacts held within the museums, to highlight what treasures can be found in these local repositories.


Microliths, tiny flakes of sharp flint, used to make arrowheads
Small commun
continue to inh
tools like these
First tentative evidence for humans in Ireland from Castlepook Cave, Doneraile.
Hunter-gatherer communities lived in seasonal camps along river systems like the Blackwater and its tributaries.
30,000BC
8000BC
6000BC
paleolithic
early mesolithic
Saddle quern used to grind grain
Artefacts made of bronze
Stone circles, rows and standing stones are erected
Knowledge of metal working in Ireland
bronze age
2200BC
Ogham script develops.
Iron is smelted
la Tene art like that on the Cork Horns
iron age
700BC
Knowledge of ironworking
0
400AD
Introduction of Christianity to Ireland
Gaelic and Anglo-Norman lords live in castles known as tower houses
late medieval period
1348 AD Black Death
Increasing numbers and types of sites including mills, bridges and limekilns are built
Desmond Rebellion and Munster Plantation
Fortified houses
post medieval period
1641 AD Outbreak of rebellion
Cromwellian's settlers replace Gaelic and Old English
1600AD
British military build forts to defend the Irish coast

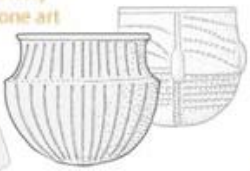
communities of hunter-gatherers
ıue to inhabit the river systems. They made
like these arrowheads from flint.

Permanent settlements
develop around new farms. Polished
stone axes used to clear fields

Introduction of farming
3900BC

late mesolithic

People begin to make pottery
and create megalithic stone art



neolithic

Christianity spreads -
creation of scattered
monastic sites
with cross slabs

Fine metal and glasswork
created in sites like Garryduff Ringfort

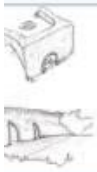
early christian period

Stone castles and
walled towns.
Increase in imported
artefacts

Normans bring rectangular
moated sites

Vikings establish
port towns like
Cork City

Normans occupy eastern half of Cork
1100AD

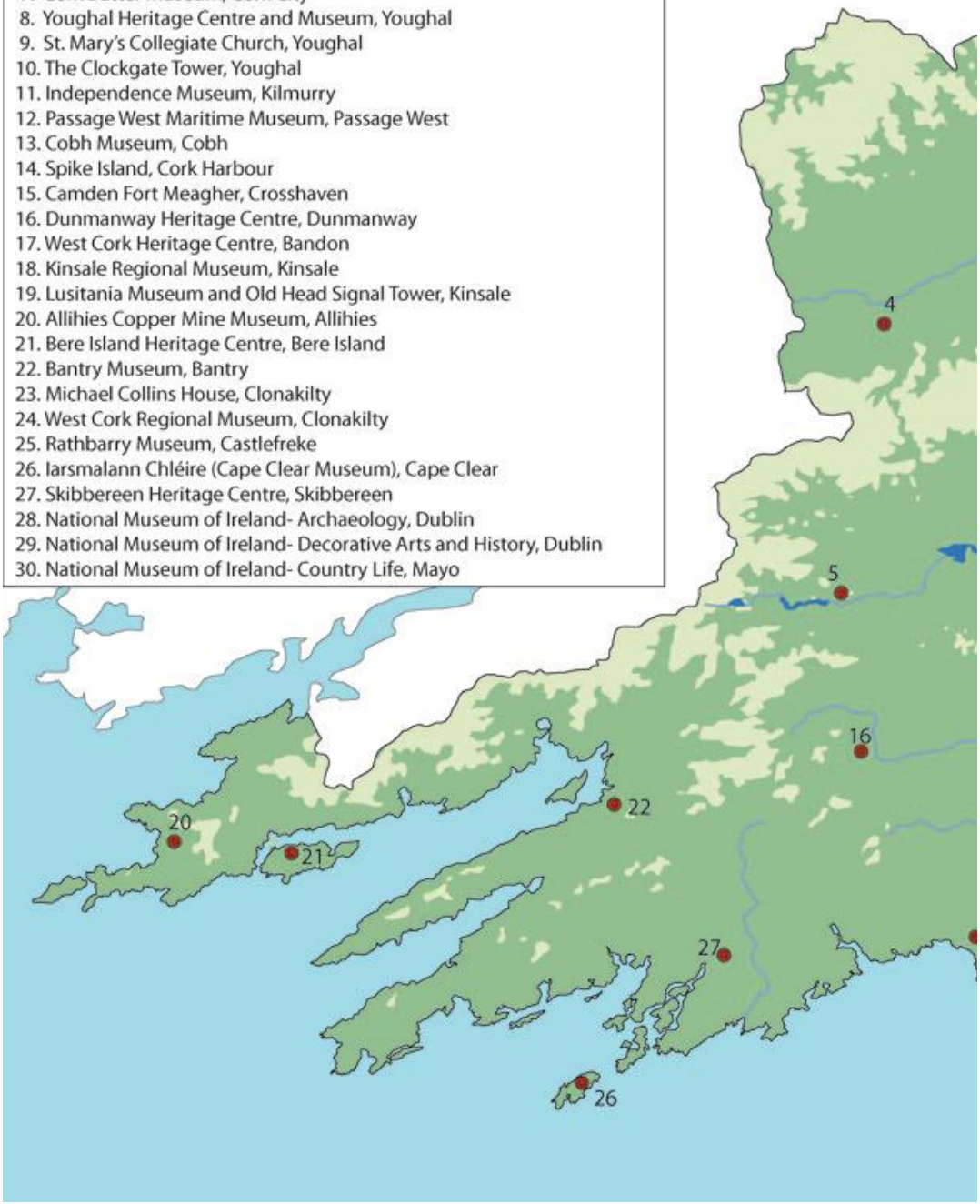


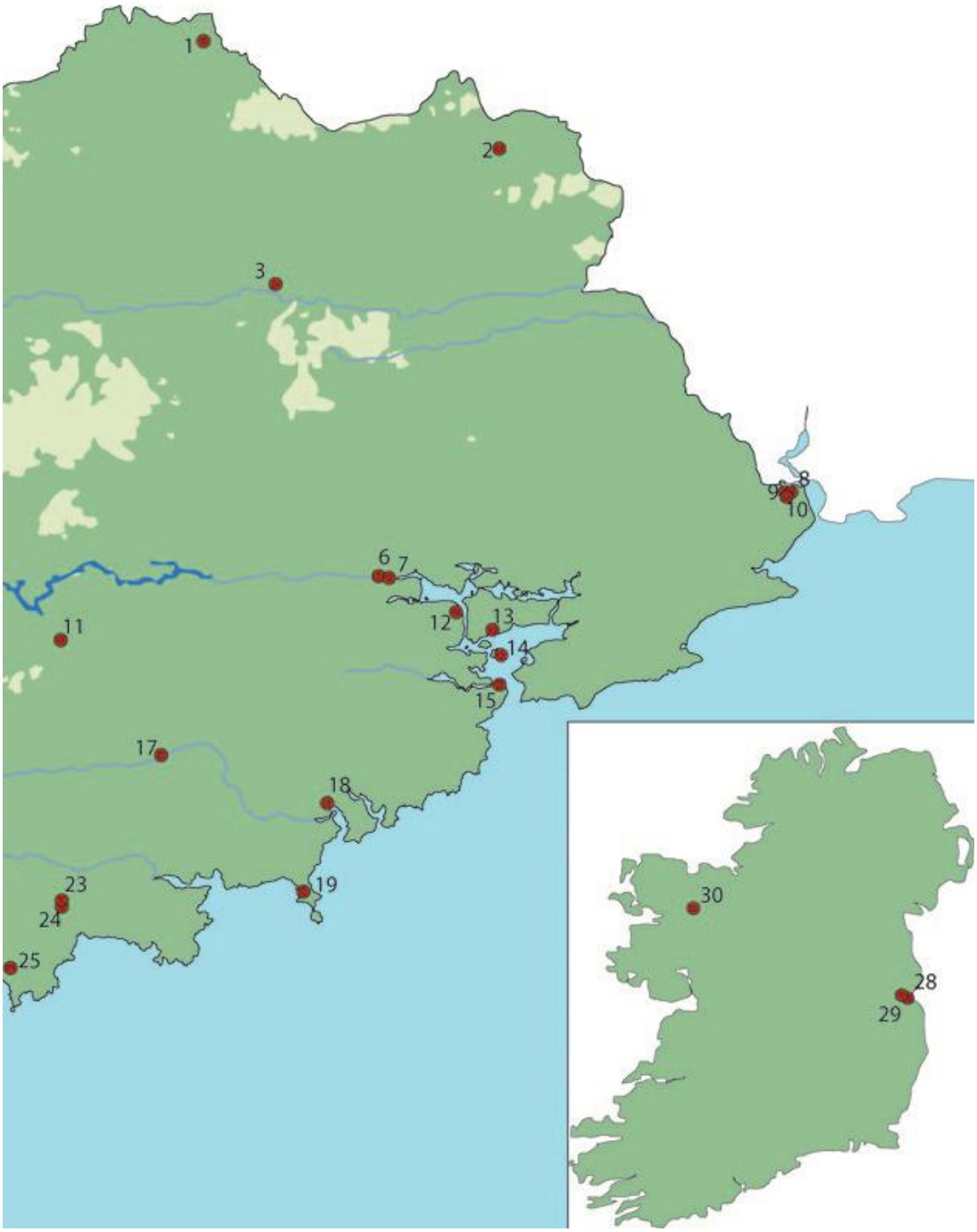
Increased fortification of Irish coastline
star shaped forts and artillery weapons
develop and tensions rise between Britain
and France.

modern period
1800AD

Irish towns
are rebuilt, new
streetscapes emerge

1. Charleville Provincial Heritage Centre, Charleville
2. Mitchelstown Arts and Heritage Centre, Mitchelstown
3. Nano Nagle's Birthplace, Ballygriffin
4. Millstreet Museum, Millstreet
5. Store of Memories Museum, Inchigeelagh
6. Cork Public Museum, Cork City
7. Cork Butter Museum, Cork City
8. Youghal Heritage Centre and Museum, Youghal
9. St. Mary's Collegiate Church, Youghal
10. The Clockgate Tower, Youghal
11. Independence Museum, Kilmurry
12. Passage West Maritime Museum, Passage West
13. Cobh Museum, Cobh
14. Spike Island, Cork Harbour
15. Camden Fort Meagher, Crosshaven
16. Dunmanway Heritage Centre, Dunmanway
17. West Cork Heritage Centre, Bandon
18. Kinsale Regional Museum, Kinsale
19. Lusitania Museum and Old Head Signal Tower, Kinsale
20. Allihies Copper Mine Museum, Allihies
21. Bere Island Heritage Centre, Bere Island
22. Bantry Museum, Bantry
23. Michael Collins House, Clonakilty
24. West Cork Regional Museum, Clonakilty
25. Rathbarry Museum, Castlefreke
26. Iarsmalann Chléire (Cape Clear Museum), Cape Clear
27. Skibbereen Heritage Centre, Skibbereen
28. National Museum of Ireland- Archaeology, Dublin
29. National Museum of Ireland- Decorative Arts and History, Dublin
30. National Museum of Ireland- Country Life, Mayo

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Museum 1

Charleville Provincial Heritage Centre

Main street, Charleville

Website: https://sistersofmercy.ie/provincialheritage/
Email: evelynkeeffe@yahoo.co.uk
Tel: 063 30545
Eircode: P56 YP79

An excellent little museum set in the old Sisters of Mercy Convent in Charleville town in North Cork, the Charleville Provincial Heritage Centre and conference centre tells the story of the Sisters of Mercy in the south of Ireland. Charleville was established in the 1660s by Roger Boyle, but much of the character of the town today comes from the eighteenth and nineteenth century shops and businesses that line the wide street.

The Charleville Convent of Mercy was founded on 29th October 1836 under Catherine McAuley, the founder of the Mercy Order. The impressive Gothic Revival building which houses the Heritage Centre today was built a few years later. Visitors to the heritage centre can see inside the building which retains some beautiful nineteenth century plaster detailing, and impressive stained-glass windows. The heritage centre is designed around illustrated panels that give information on Mercy Convents, including the three main convents in Cork: Cork City, Kinsale and Charleville itself. The Sisters of Mercy played an important role in community life in Ireland, particularly in their role establishing schools for Catholics in towns across the country at a time when education was reserved for higher social classes and members of the Established Church.

In addition to a small archive of documents related to the Sisters of Mercy, the Heritage centre holds a collection of lace samplers once created for teaching, along with an appealing collection of artefacts illustrating domestic life in Ireland in the 19th and early 20th century, from ceramic bottles to butter moulds. The building is wheelchair accessible, and visitors typically spend about an hour here. Opening hours vary so check before you travel.

Charleville Provincial Heritage Centre,

A great array of artefacts is available to see within the centre.

Museum 2

Saint Georges Arts and Heritage Centre, Mitchelstown
George Street, Mitchelstown

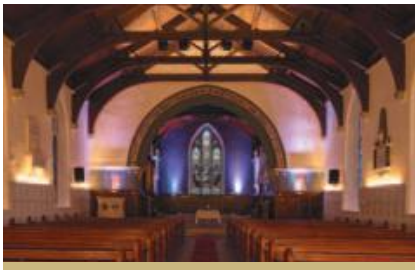
Website: www.saintgeorgesmitown.com
Email: brigownspire@gmail.com
or stgslate@gmail.com
Tel: +353 87 3920423
or + 353 87 8113611
Eircode: P67 XC61

Saint George's Arts and Heritage Centre is set in the former striking Church of Ireland parish church in Mitchelstown which stands in a commanding position at the end of George Street. Saint George's Church was deconsecrated in 2017 and purchased by the local community in 2019. The church is a dynamic venue for a wide range of arts, cultural, heritage, tourism and civic-based activities, including a dedicated archive and library. The enterprise has had the support of Cork County Council and Ballyhoura Development and continues to fundraise for the necessary works to the structure.

The centre is a focal point for historical, genealogical, cultural and heritage events in this elegant North Cork town. An interactive interpretation telling the story of the region over the centuries is planned. Topics will include the development of the town, the Galtee Mountains and the history of Mitchelstown Castle and the Kingston estate. This dedicated space will also provide a permanent display for the coats of arms of Mitchelstown Castle which have been gifted to the centre. Also, within the building, the organ is reputed to be the oldest in Ireland. It is scheduled for conservation when funds become available, and the people of Mitchelstown are justifiably proud of this feature.

Opening times and entry fees vary depending on events hosted in the site, so check before you travel. Visitors can spend anywhere from half an hour to three hours here, depending on the events running. The venue is available for heritage events and for civil marriages, conferences and meetings and there is parking nearby.

Saint George's Arts and Heritage Centre.



The centre was used as a church before it was deconsecrated in 2017.

ARTEFACT 77

Name: Coat of arms
Location: Mitchelstown Heritage and Arts Centre
Material: Stone
Date: 1800s
Period: Modern

The country house, set within an enclosed demesne landscape, was an important component of the Irish landscape in the 18th and 19th century. Mitchelstown Castle is a good example, it was built by George 3rd Earl of Kinston, in 1823 to a design by James and George Pain on the site of an earlier castle. The massive house, with a 100-foot-long gallery, was one of the biggest neo-Gothic houses in Ireland.

The house was occupied by Republicans during the Civil War, ransacked and burned in August 1922. The stones of the ruins were subsequently sold to the Cistercian Monks of Mount Mellary Abbey in County Waterford. The only remains of the magnificent house are four carved stones bearing the coats of arms - they represent the successive owners of Mitchelstown: FitzGibbon the White Knight, Fenton and King, Earls of Kingston. This example is limestone with the armorial plaque carved in relief. The depiction is somewhat different to the heraldry registered for the Kingston family, reflecting ties by marriage to several other houses. The arms, set on a shield, is quartered (divided into four) and shows a cross surrounded by Fleur de Lis in the top left and bottom right; a lion rampant in the top right and a lion rampant surrounded by eight maltase crosses in the bottom left.

Coat of Arms from Mitchelstown Castle.

Museum 3

Nano Nagle Birthplace
Ballygriffin, Killavullen, Mallow

Website: www.nanonaglebirthplace.ie/
Email: secretary@nanonaglebirthplace.ie
Tel: +353 (0)22 26411
Eircode: P51 CV91

The birthplace of one of Cork's most beloved daughters, Nano Nagle, this charming centre in beautiful and peaceful surroundings is worth a visit for anyone interested in the founding of the Presentation Sisters. Nano (Honora) Nagle was born to a wealthy family in Ballygriffin in 1718. Dedicating her life to helping those less privileged, she opened her first school in 1754 with an enrolment of thirty-five girls in a two-room cabin. She also visited and nursed the sick, becoming known in Cork as the Lady with the Lantern. Realizing the need for a group to continue her work after her death, Nano founded the Sisters of the Presentation in 1775. She died from tuberculosis in 1784 and is buried in the Nagle Centre in Cork City - her tomb has become a place of pilgrimage and meditation. Nano's house no longer survives but some of the attendant farm buildings remain and relocated entrance gates. When the Presentation Sisters first came to live in Ballygriffin in 1984 they converted the old farm buildings into a living Heritage and Spiritual Centre. There is an interesting heritage room to visit which is based on the life of Nano and heritage of the Blackwater valley. It contains the nursing chair where Nano Nagle was fed as a baby.

There are regular retreats, lecture programmes, courses and workshops which can be booked though the website. Many are fee paying. Conference facilities and accommodation are available to hire. There is parking on site and longer workshops or courses usually include refreshments.

The birthplace of Nano Nagle.

information on Nano Nagle.

ARTEFACT 78

Name: Nursing chair
Location: Nano Nagles Birthplace
Material: Wood, leather, brass, ceramic
Date: 1700s
Period: Modern

This corner chair, made of mahogany with deep carved detailing, leather covered seat and brass and ceramic caster feet, was once owned by Nano Nagle's mother. It is believed to be a nursing chair used by her mother when Nano was an infant. It was presented by Mrs. Sheehy McGovern and is on display in the heritage room.

This item of furniture illustrates some of the material culture associated with wealthy people in the 1700s. Made of expensive materials, and finely detailed, a chair like this was certainly not part of the homes of the people Nano would have helped in her role as teacher or nurse.

Nursing Chair.

Museum 4

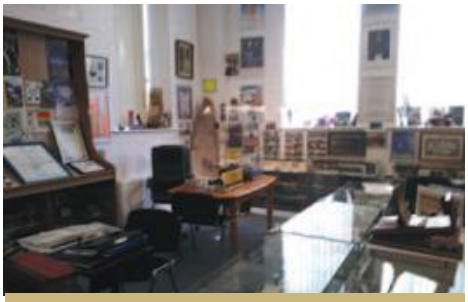
Millstreet Museum
Millstreet

Website: www.millstreet.ie/blog/category/organisations/museum
Email: contact@millstreet.ie
Tel: 029-70844
Eircode: P51 TC52

An excellent little museum set in the heart of Millstreet in North Cork. Millstreet Museum is housed within a former Carnegie Library building and is now a Library and Cork County Council offices. A Carnegie Library is a library built with money donated by Scottish-American businessman and philanthropist Andrew Carnegie. Between 1897 and 1913 he promised over £170,000 to pay for the building of about eighty libraries in Ireland. Sixty-six of the libraries were built and sixty-two of them have survived, this lovely classically styled building is a great example. The incredible collection of artefacts, written and printed archives and photographic collections allows the visitor to experience the history of this North Cork area and gives an insight into its fascinating past. The display includes unboxed artefacts, collections in glass and display boards. Of particular interest are the collection of toys laid out in the large display room, including a beautifully carved and painted wooden horse.

Entry is free. The museum building also houses a busy tourist information point and a café is situated nearby in the town. Regular guided tours of the town and area are organised, and brochures are also provided. Millstreet Museum has facilities for the disabled and a car park.

Millstreet Museum is contained within this fine building.



The interior of Millstreet Museum.

Artefact 79

Name: Horseshoe
Location: Millstreet Museum
Material: Iron
Date: 1900s
Period: Modern

Horse Shoe.

In 1837 Millstreet was known for its weekly animal markets, where cattle, pigs and horses were sold. By the 1900s the town had become synonymous with horse trading and training. Noel Duggan's first horse show, in 1970 in Millstreet Park, was the kernel from which the famous Green Glens Arena was developed, and the rich soils of North Cork are still well known for the quality of horses that can be reared on them.

Today, horse ownership is seen as somewhat of a luxury, but this simple iron horseshoe represents the importance of horses in everyday life in the past. They were used by people from all walks of life for transport, in agriculture and even to power some industrial sites. Shoes are important because working horses were exposed to harsh conditions on a daily basis, and so hoof breakage or excessive damage was commonplace. It soon became clear that horses equipped with shoes had better grip on difficult terrains because nails provided traction, and indeed they ran faster than unshod animals. C-shaped metal horseshoes attached with nails, like this one, developed as early as the 14th century, replacing leather or woven bag-like shoes. The earliest shoes were hand forged by a blacksmith, but the 1800s saw the invention of a machine capable of mass-producing blank horseshoes that could then be altered and fitted to an animal by the farrier. This example is probably a mass-produced blank. The design has changed little today, although aluminium is a more common material choice. The horseshoe also represents the importance of the local forge in an area and the wide range of goods that were made and repaired. There were a number of forges in the locality. The blacksmith Tom Radley had his forge in The Square, Millstreet - the tools of his trade are on exhibit in the museum.

Hanging a horseshoe on or over the door of a home, to bring good luck to those inside and to keep the devil away, has long been a tradition in Ireland. As a result, more horse shoes have survived as archaeological artefacts than one might expect.

Museum 5

Store of Memories Museum
Inchigeelagh, Macroom

Email: dotuama@live.com
Tel: +353868539744
Eircode: P12 FY61

The aptly named Store of Memories Museum in Inchigeelagh has an engaging and diverse collection of artefacts. This small village on the Derrivane River, a tributary to the River Lee, is famous for its fishing and natural heritage. The nearby 'paternoster' string of lakes - Lough Allua - hold pike, perch, and some brown trout. Inchigeelagh was the meeting place for the Lyre Company Irish Volunteers, in April 1916, from where they intended to collect some of the rifles sent by Roger Casement on board the *Aud* for use in the 1916 Easter Rising.

The community run museum is administered by the O'Sullivan family. The building was once a general grocery shop, and a lot of the collection comes from the shop itself, which traded between 1912 and 2007. The building, a corrugated iron structure, is a great example of 20th century vernacular architecture and worth a visit. The museum collection displays a fascinating social history of village life during the early 20th century, with its old grocery packages and product ranges, memories of past customers, and emigration stories. Amongst the archive treasures to be found are letters from villagers from the parish circa 1908-1913, credit ledger books from 1917-1980s, and the history of Dora O'Sullivan who was a local District Nurse & Midwife from 1916-1956.

Admission is free and the building is ranged over a single floor so is wheelchair accessible. Groups are welcome but please book in advance. There is ample parking nearby. The building is open from June to October, Friday, Saturday and Sunday from 2-5pm.

A look inside.

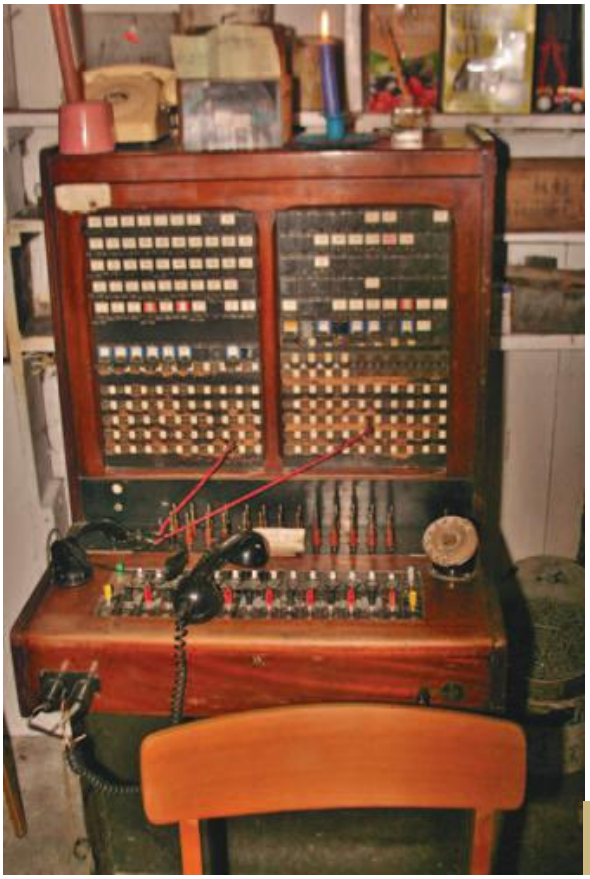
The Store of Memories Museum in Inchigeelagh.

ARTEFACT 80

Name: Telephone exchange
Material: metal, plastic, glass, wood
Location: Store of memories, Inchigeelagh
Date: c.1900
Period: Modern

A telephone exchange is a telephone switch system designed to provide interconnection of lines within a small geographic area. Exchange switch boards replaced direct line telephone systems that connected users with direct lines between individual subscribers. Exchanges made telephony more affordable, meaning more people could be connected. It gave the impetus for the development of telecommunications as an industry marketed to all instead of an elite facility.

Exchanges like this were often provided in local post offices or general merchants like the Inchigeelagh shop. It would have made a big difference to the local social and business life of Inchigeelagh. How times have changed!



Telephone Exchange.

Museum 6

Cork Public Museum
Fitzgerald's Park, Cork City

Set in the grounds of Fitzgerald's Park in the Mardyke area of Cork City, Cork Public Museum is a fantastic educational resource and heritage attraction serving Cork City and County. The museum is set in a converted nineteenth century house. Built in 1845 by the Beamish brewing family, the house and gardens were purchased by Cork Corporation to become part of the 44-acre site of the 1902 Cork International Exhibition. The Exhibition Committee used the house for visiting dignitaries who included King Edward VII and Queen Alexandra.

Website: www.corkcity.ie/corkcityco/en/cork-public-museum
Email: museum@corkcity.ie
Tel: +353 21 4924000
Eircode: T12 V0AA

Cork Public Museum.

A wide variety of exhibitions are displayed in the museum.

Cork Public Museum is the oldest local authority museum in Ireland, having opened its doors in 1945. The museum was modernised and extended in more recent years, and the impressive collection of artefacts is set in state-of-the-art display cases. The displays bring the visitor from the Mesolithic to the modern day in large rooms set over two floors. There are screens where educational videos are shown. Artefacts consist of a selection of significant finds from throughout the county, including lithics and Bronze Age pottery, the beautiful and delicate Garryduff gold bird, finds from Garranes ringfort, and a large collection of finds from the city itself. There is also a small selection of exotic artefacts donated to the museum from private collections or retained from the museum's earlier 20th century displays. A periodically changed thematic display area is designed to entertain repeat visitors, at present this focuses on commemoration of early 20th century war and rebellion. The museum is the only officially designated museum in Cork, meaning it can hold artefacts from the National Collection (artefacts that would normally be sent to the National Museum in Dublin).

The museum is wheelchair accessible, with a lift to the upper floor. It is free, supported by Cork City and County Councils, and open five days a week (closed Monday and Sunday). Opening hours are subject to seasonal change so check before you travel. Paid street parking is available on the streets of the Mardyke, and the area is serviced by the 208 and 220 bus routes (stopping on nearby Western Road). There is a café in the museum building with separate access and longer opening hours, and the playground in the surrounding park will keep young visitors happy. Most people spend a few hours looking over the displays.

Museum 7

Cork Butter museum

O' Connell Square, Shandon, Cork City

Website: http://thebuttermuseum.com
Email: info@thebuttermuseum.com
Tel: 353 (0) 21 4300 600
Eircode: T23 H004

The Cork Butter Museum is a museum in Cork city which documents and celebrates the incredible success and importance of Ireland's butter trade. It is housed in the former Cork Butter Market. The incredible collection of butter related objects held in the museum has the power to fascinate and engage. The museum collection tells the story of butter from medieval times through to the establishment of the internationally important Butter Exchange in nineteenth century Cork. This market was once the largest butter market in the world, shipping product made in the agricultural heartlands of Cork and Kerry all over the world and supplying the British Navy and merchant fleets. Audio visual and cased exhibits also include information on the modern success of the Kerrygold brand. In this story, the commercial, social, and domestic life of Ireland is explored. Exhibitions are a combination of artefacts, replicas, information panels, multimedia experiences and interactive displays. The website contains additional information and resources, including a section dedicated to children.

Visitors can find plenty to engage their interest for a few hours. There are other visitor attractions, cafes, and cultural venues nearby. The museum is open Tuesday to Saturday 10am-4pm, and Sundays 11am-4pm. Entry is €5 for adults with concessions for children, students and seniors. Parking in the Shandon area is limited so walk or use public transport if you can.

Interior.

Cork Butter Museum.

ARTEFACT 81

Name: Butter Box
Material: Wood
Location: Cork Butter Museum
Date: mid-20th century
Period: Modern

In the 19th/early 20th century the butter trade was a domestic industry, manufactured by hand in rural farmhouses, and packed in wooden barrels and carried along the butter roads to a the highly organized and successful butter market in Cork City. By the early 20th century, with the establishment of creameries replacing the dispersed domestic craft industry, the barrels were replaced by 56lb square butter boxes, exampled of which can be seen in the Cork Butter Museum and in many of the local museums around the county. This box is unusual in that it comes, not from a co-operative creamery, the normal origin of butter boxes, but from a private company, the city based Dowdall O'Mahony. The box had an "F" (Factory) number, rather than the "C" prefixed numbers used by creameries. Nor does it describe itself as "Creamery butter", a designation which, up to recently, was protected. Factory butter was usually a blend of butters from different sources and did not enjoy the same reputation as creamery butter.

Butter box on display.

Museum 8

Youghal Heritage and Visitor Centre
Market Square, Youghal

Website: https://youghal.ie/organisation/youghal-visitor-centre
Email: tourism@youghalchamber.ie
Tel: 024 20170
Eircode: P36 VY44

The Heritage and Visitor Centre in Youghal is combined with the tourist information office, located on the quays in a former warehouse in Youghal town centre. The historic town of Youghal is one of the gems of the 'Ancient East'. The Visitor Centre has plenty of useful maps, and information on places to go and things to do in Youghal and surrounding area. There is a small shop and plenty of parking and cafes within a few minutes' walk of the building.

The adjoining Heritage and Visitor Centre tells the story of the town from medieval times to the present, with very informative illustrated panels supported by a small selection of artefacts, images, and models. Worth a look are the maces of the town clerk displayed within a glass case; the 17th century pikes mounted to the wall, and the displays of Youghal craftworks including the internationally renowned Youghal Lace. The display is on a single level and is wheelchair accessible, and an average visitor will spend about an hour here. Admission is free and the building is open year-round, seven days a week 9am to 5pm.

The exterior of Youghal Heritage and Visitor Centre.

Exhibitions within.

ARTEFACT 82

Name: Water Bailiff's Mace
Location: Youghal Heritage and Visitor Centre
Material: Brass
Date: 1649-1660
Period: Early Modern

Water Bailiff's Mace.

This mace was the symbol of authority for the Water Bailiff of Youghal, an administrative authority for the harbour area. The bailiff was a law-enforcement officer responsible for policing the harbour, with the power to detain people and confiscate property as necessary. This brass staff, cast in three pieces with decorative joint covering, has a cup at the top decorated by punched detailing. It was probably produced locally in the town and would have been a visual que for anyone coming into the harbour that the bearer had the authority to carry out inspections and go about the business of law enforcement.

Museum 9

St. Mary's Collegiate Church Youghal
The Raleigh Quarter, Emmet Place, Youghal

Website: https://youghal.ie/organisation/st-marys-collegiate-church
Email: youghalheritage@gmail.com
Tel: 083 402 6613
Eircode: P36 AH64

A focal point in the medieval town of Youghal, Saint Mary's Collegiate Church has an amazingly rich history. Nestled under an upstanding stretch of Youghal Town Walls, the medieval church is of international significance. The building was erected in 1220 and extended in the 14th and 15th centuries, it has some magnificent architectural details, fascinating plaques, and effigies. The interior of the church is dominated by the Boyle memorial - a wonderful example of 17th century funerial sculpture. Close by, a carving of a ship etched lightly into one of the stones is thought to be a representation of a Viking vessel, one of many which would have raided the town many centuries prior.

Saint Mary's Collegiate Church.

In addition to information signage, leaflets and a small collection of artefacts, the church hosts the 'Voices of St. Mary's Collegiate Church' interpretive installation. Visitors can choose from a personal guided tour, a self-guided audio tour or simply wander and read the interactive information displays. The story follows a timeline from 1220 A.D. to the present day and includes information on archaeological excavations that were carried out within the building.

The church has plenty to keep a visitor busy for an hour or so and there is ample parking, cafes, and other heritage attractions in the town. Weather permitting visitors can wander the surrounding graveyard and take the signposted trail or walk on the medieval walls with outstanding views over the town. Access is free, the church is open daily but guided tour times vary, so check before you travel. Most of the church is wheelchair accessible but the surrounding graveyard is set over a slope and there are steps.

One of the displays in the church.

ARTEFACT 83

Name: Ceremonial Sword
Location: Saint Mary's Collegiate Church, Youghal
Material: Brass
Date: c.1700 A.D.
Period: Modern

The right for the Mayor of Youghal to have a Swordbearer dates to a charter granted by King James 1 in 1609-10 A.D. The Swordbearer carried a ceremonial sword before the mayor on special occasions. In 1684 A.D. a sword rest was placed in this church to hold the sword when the Mayor was in attendance. It illustrates the importance of pageantry in Ireland at this time. The sword, swordbearer and sword rest were all visual displays of wealth and status, which would have played a part in the maintenance of the power hierarchy.

Ceremonial Sword.

Museum 10

The Clockgate Tower & Youghal Courthouse

Main street and Market Square, Youghal

These two attractions in Youghal, both owned by Cork County Council, are an incredible source of information on the heritage of the town. The Clockgate is an iconic tower completed in 1777 A.D. that straddles the main street, marking what was once the entrance to the medieval walled town. Visitors can move though the four stories of the 24 metre high tower and learn about its diverse past as a clock tower, gaol and centre of trade. The clock and wonderful bell are a must see. The roof walk gives great views over Youghal. This is a fee-paying attraction that will take about an hour, the tower is open daily from 11am to 4pm in the summer months and opens for prebooked tours off season. There are some steep and narrow steps so this site is not suitable for all visitors.

Next to the tower, in Market Square, the Old Courthouse, part of which was used as famine soup kitchen, will become the new home for the Pat Lynch Collection, once displayed in Fox's Lane Museum. This massive collection of ephemera and local memorabilia was originally displayed in a private museum. The artefacts tell the story of domestic life in Ireland from the 19th and 20th century. Work to curate and display the 600+ items is ongoing, and it will form part of the new Courthouse restoration project led by the County Council. The holding

Website: https://youghalclockgate.ie
Email: tours@youghalclockgate.ie
Tel: (024) 20769
Eircode: P36 FR79

Youghal Clockgate Tower.

First floor Clock Gate.

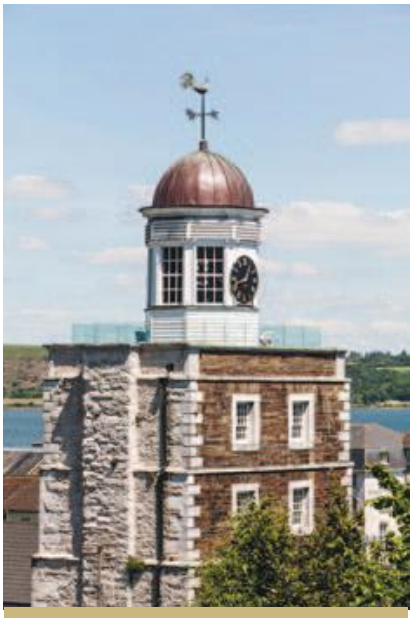
Pat Lynch Collection in Fox's Lane Museum.

includes themed exhibits such as cleaning machines from old to new - including manually operated vacuum cleaners and washing machines. There are sewing machines dating back to the 1860s; the Edison Phonograph and early gramophones, telephones, typewriters and radios, as well as a very wide selection of food preparation and cooking equipment.

ARTEFACT 84

Name: Clock
Location: Youghal Clock Gate Tower
Material: Metal (various)
Date: c.1770 A.D.
Period: Modern

As the name suggests there is a clock in the tower, which has an interesting past and still plays an important role in the town today. Public clocks were vital in an era before most people had their own watches and clocks. In Youghal a caretaker was employed to wind the clock and keep it in good repair. He was also responsible for ringing the bell to sound the alarm, for example in case of fire, and to announce events. The clock here in the centre of the town would have been an important feature, particularly as the railway becomes a key mode of transport in Youghal - trains ran to a strict timetable. Indeed, it was the introduction of the railway that led to the standardisation of time across Britain and introduced the concept of 'Greenwich mean time'.



The clock above the building's floors.

There are many references to the town clock in Youghal in the town hall and in Cork County Archives. We know that in 1778 A.D. a Mr. Aickin of Cork was paid for repairing and fixing the clock, and a year later in November 1779, a flask of oil was given to Holloway for the maintenance of the clock per Youghal's Mayor's order. The clock was again repaired in 1781 by Thomas Halloway, presumably the clock tender, and it was painted by Conway Johnson that same time. William Patterson 'clock tender', looked after the clock from 1795 until his death in 1816, and J. Sangster was paid to wind the clock from the 1840s to about 1850 when Florence McCarthy took over. The dials of the clock were lit from at least the 1850s. The first lights were oil lights, then gas, then (in the 1950s) electricity. John McGrath and then his son Christopher (Christy) was in charge of winding the clock and ringing the bell (when needed) from 1915-1959. The clock was wound twice a week. The bell chimed automatically with the clock mechanism but could also be rung separately in case of fire or on special occasions.

In 1891, it is said that a young man, Michael Sullivan fell and died when he was cleaning the lamp at the front of the Clock Gate Tower. As compensation, his family were given £5 and his father given the job to look after the clock. A replica of the clock is on display in the upper floor.

ARTEFACT 85

Name: Dresser, Pat Lynch Collection
Location: Youghal Court House (Foxes lane museum exhibit)
Material: Wood
Date: 1800s
Period: Modern

Dresser.

In the 18th, 19th and early 20th centuries the dresser was an important piece of furniture. Irish traditional furniture is vernacular in nature and an important part of our vernacular heritage built and owned by ordinary folk that made up the vast majority of the community. This is a great example of an Irish dresser. It was used for storage, display, as a workstation for food preparation and even as a home for chickens and small fowl. This example from the Pat Lynch collection has wooden bars enclosing shelves on the lower half. This area was once a chicken nesting box, very convenient for fresh eggs for breakfast. Above this, shallow wooden brackets create a wider shelf at about an adult's hip height, making an area which would have been used as a countertop. The rest of the unit contains built-in shelves, with a shallow groove cut in the shelf near the back that allows secure storage of plates as shown, and space in front of the plates to store cups, jugs or bowls. Many dressers were designed with hooks for cups or other handled items, and even brackets where fire irons could be stored. At a time when a built-in kitchen was unheard of this single item of furniture met so many needs.

Museum 11

Independence Museum Kilmurry
Kilmurry, Lissarda

Website: http://kilmurrymuseum.ie
Email: khaamuseum@gmail.com
Tel: 021 7336932
Eircode: P14 R940

Overlooking the Lee Valley from a height in Kilmurry village, Independence Museum Kilmurry is set within a modern structure and is the only purpose-built museum in the county. Established by members of the Kilmurry Historical and Archaeological Association with the help of the local community, the building may seem small from the outside. However, the two-storey building is home to a diverse and fascinating collection reflecting the activity around Kilmurry during the War of Independence and Civil War. The surrounding region includes the key sites of Lissarda, Kilmichael, Béal na Bláth, and Crossbarry, the story of which is told through the museum's artefacts and archival material. Some of the artefacts on permanent display include the wheel from the Crossley Tender used in the Kilmichael Ambush, a man-trap used to catch poachers, Tom Barry's suitcase, artefacts relating to Terence MacSwiney, sports paraphernalia and many other objects relating to military events. There are also displays telling the story of local folk life and local landed estates from the 18th-20th centuries. Temporary exhibitions allow the museum to stay engaging to repeat visitors.

The Independence Museum is open Thursday to Sunday and on bank holidays, from 2-5pm. Group viewing outside normal hours is possible with advance booking. The modern building, also housing a community centre, is wheelchair accessible. There is a small bookshop onsite.

Independence Museum Kilmurry. Image courtesy of Aoife Nelligan.

The main exhibition room downstairs in the museum.

ARTEFACT 86

Name: Wheel
Location: Kilmurry museum
Material: Iron
Date: 1920 A.D.
Period: Modern

A Crossley Tender Wheel from the Kilmichael Ambush of November 1920.

The Kilmichael ambush took place on 28th November 1920, when Tom Barry of the West Cork Flying Column led his troops to ambush two lorries, each carrying auxiliaries recruited to support the police and organise reprisals against supports of the I.R.A. volunteers. This engagement between the I.R.A. and auxiliaries is remembered in the ballad 'The boys of Kilmichael'. This distinctive rear (double) wheel from one of the two Crossley tenders of the Auxillary Division of the R.I.C. was one of the first accessions of the Kilmurry Museum. The wheel was buried by then fifteen-year-old I.R.A. scout John Griffin and retrieved in 1965 when the Kilmurry Museum first opened. It was restored and re-cased in a temperature-controlled Perspex case.

Museum 12

Passage West Maritime Museum
Passage West

Website: www.passagemuseum.ie
Email: info@passagemuseum.ie
Tel: 0871357634
Eircode: T12 EE05

This fascinating museum dedicated to maritime life is a must see. Once featuring the Royal Victoria Dockyard as well as being home (at least between voyages) to many seamen, Passage West has a rich maritime heritage stretching back centuries. The Maritime Museum, which opened in 2018, includes a rich collection of artefacts and archival material from Passage West itself as well as nearby Glenbrook, Monkstown and the general lower harbour area. The collection covers a wide variety of themes including shipbuilding and ship repair, emigration, the steam-powered ship industry (of which the town is the Irish birthplace) and the U.S. naval presence in Cork Harbour.

Open Wednesday to Friday, 2-5.30pm, and Saturday and Sundays, 2-5pm, the museum charges adults an admission fee of €2. Temporary exhibitions are also held, and guided tours are available by arrangement.

The exterior of Passage West Maritime Museum.

One of the displays in the museum.

Museum 13

Cobh Museum
1 High Road, Cobh

Email: cobhmuseum1@gmail.com
Tel: 353 21 4814240
Eircode: P24 AY26

A wonderful little museum that many people describe as a hidden Gem. Set in a former Presbyterian Church, dated 1854, on one of the higher streets overlooking the town and harbour to the south, this charming museum has a large collection of artefacts, archives, and photographs. The museum has several information panels used to support glass display cases. The exhibitions reflect the cultural, social and maritime history of Cobh and the Great Island. The display is periodically changed, with thematic displays chosen to allow the artefact collection to be rotated and refreshed. Past displays include animals in war, the scuttling of the Aud, and Capture the Time (Cobh family photos from the 1950s and 60s). Information on the Lusitania is on permanent display. When, in 1915 the RMS Lusitania was torpedoed off the Old Head of Kinsale, survivors and victims were brought to Cobh (then Queenstown). The Old Church Cemetery in Cobh became the final resting place for 169 of the souls who perished. The Museum is keeper of objects related to this significant event.

The building, which is owned by Cork County Council, is a protected structure and visitors can view the beautiful church interior with leaded and coloured glass and open truss roof. There are steps up to the main door and some visitors may find access difficult. It is open seasonally every day, but times vary so check before you travel. There is a nominal entry fee. Parking is free in town carparks or on the streets of Cobh (street parking payable in machines set around the town). The nearby Cobh Heritage Centre is also worth a visit. This fee-paying heritage centre is set within the old railway terminus building in the town, and houses the stockless anchor from the Aud, available to see free of charge.

Cobh Museum.

Many different events are often held in the museum, pictured is a launch of a publication on the Lusitania.

ARTEFACT 87

Name: Harmonium
Location: Cobh Museum
Material: Wood and Metal
Date: 1800s
Period Modern

Harmonium.

Music played, and indeed still plays, an important role in Christian worship. The former Presbyterian Church that houses Cobh Museum retains many original features, including this harmonium. The harmonium, also called Reed Organ, was a popular instrument in small churches in the 19th century. It is a keyboard instrument that makes sounds when wind from a foot-operated bellows is forced through an air reservoir causing metal reeds to vibrate and sound against their frames. Unlike an organ, there are no pipes, the pitch is determined by the size of the reed. Volume is controlled by a knee-operated air valve or directly from the bellows pedals.

Museum 14

Spike Island
Spike Island, Kennedy Pier, Cobh

Website: www.spikeislandcork.ie
Email: admin@spikeislandcork.ie
Tel: (021) 237 3455
Eircode: P24 P681

This exciting heritage site, situated on an uninhabited island in the middle of Cork harbour and only accessible by boat, is a fast favourite with all visitors. Spike Island has an exciting and remarkable history stretching back 1300 years. An early medieval monastic site was founded on the island in the 7th century. Since the 1650s the island has been used as a prison and was at one point said to be the largest prison in the world and used at various times as a holding place for convicts, including political prisoners, awaiting transportation to other colonies. It is the military history that is the star of the show today. From 1779 A.D. the island was fortified by the British military and around 1850 the 24-acre Fort Mitchel was completed, a massive star-shaped fort, which visitors can explore today. Attractions include a range of buildings, fortifications, military equipment, artefacts and archival material. Of particular

The entrance to Fort Mitchel on Spike Island.

One of the many exhibitions to marvel at on Spike Island.

interest are the Punishment Block (an 1858 prison), the cells where the infamous 1985 Riot took place, Ireland's largest Artillery Gun Park with cannons and modern military machines, the 6" harbour defence guns (the largest in Ireland), and a recreation of the hold of a convict ship.

Spike Island is reached by ferry from Kennedy pier, in the centre of the heritage town of Cobh. Tickets can be bought at the kiosk here, the price for an adult ticket is €20, concessions are available. The site is open seven days a week from April to October, weekends and half-terms in February/March and November and can be open by arrangement in December/January. The ticket cost includes the 10–17-minute ferry crossing and a guided tour (up to 45 minutes), though self-guided tours are also an option. The island features two walkways, the 20-minute 'Glasis' walk around the fortress with stunning harbour views, and the 'Ring of Spike' walk, a 45-minute trail along the coastline. A free map and app as well as signage informs the walk. Pre-booking is recommended in peak season. There is a small café and giftshop onsite. Most visitors spend half a day here, times will be dictated by the ferry and tide times.

ARTEFACT 88

Name: Clay pipe
Location: Spike Island
Material: ceramic
Date: 1800s
Period: Modern

Clay pipes are one of the most iconic artefacts of the modern period. They were invented by Native Americans and introduced to Ireland by Sir Waler Raleigh on his return from what is now Virginia with tobacco. By 1680 A.D. the practice of smoking tobacco in locally made clay pipes was widespread.

The size of the bowl on a pipe varied with the cost of tobacco, as prices went down the bowl size went up to allow more tobacco to be packed in. The length of the pipe stem also varied with fashion. As a result, pipes are sometimes used as a dating tool on archaeological sites. By the beginning of the industrial revolution tobacco pipes had become a decorative item, with moulds used to create ever more intricate pipe bowl designs. This 5cm high bowl from the fortress on Spike Island is beautifully decorated. Although broken at the stem, the pipe is complete enough to see the raised relief of a towered castle surmounted by a crown, with the name of the regiment stamped across this design. Below there is the image of the sphinx and 'EGYPT' stamped just beneath, probably indicating one of the postings the soldier who once used it had prior to being stationed in Cork. It represents some of the material culture of the soldiers who lived and worked in the fort.

Clay Pipe exhibited on Spike Island.

Museum 15

Camden Fort Meagher
Crosshaven, Carrigaline, Cork

Website: www.camdenfortmeagher.ie
Email: bookings@camdenfortmeagher.ie
Tel: 085 850 1483
Eircode: P43 WY82

Camden Fort Meagher is an amazing site where artefacts are displayed in some wonderful military architecture. Camden Fort Meagher is set a little outside of Crosshaven, on a promontory jutting out into the west side of Cork Harbour, with stunning views in towards Spike Island and Cobh, and out to the ocean. The fort along with Fort Carlisle (Davis) and Fort Westmorland (Spike) defended the entrance to Cork Harbour. It was built in 1779 and remodelled into its present form in 1861. Most of the surviving buildings date to the 18th and 19th centuries. The artefacts on display, in the barracks rooms, are a mixture of those found on site by archaeologists and volunteers, and those donated by the local community. Of particular interest are the several clay pipes, toiletry products including an areca nut toothpaste jar, and small fragments of military paraphernalia, which illustrate the lives lived by soldiers in the fort from the 19th century into the post-independence era.

Aerial view of Camden Fort Meagher.

One of the many displays in Camden Fort Meagher.

This heritage attraction has plenty to keep a visitor's interest for four or five hours. It is typically open weekends in the summer months, but opening hours vary so check before you travel. There is plenty of parking outside the site, and the seasonal café is augmented by several restaurants and pubs in nearby Crosshaven. A bus from cork city (220) stops regularly outside the fort.

ARTEFACT 89

Name: Armstrong 7-inch rifled breech loading gun
Location: Camden Fort Meagher
Material: Iron
Date: 1860-1890
Period: Modern

Camden Fort Meagher is a great example of the many forts and defensive features that were constructed in Ireland by the British government in response to threats from abroad. There are several decommissioned guns within this fort. Many of these were buried for two reasons, to put them out of use as weapons, and to give them a new function as posts in a rope hauling system.

This Armstrong 7-inch rifled breech loading (RBL) gun is part buried in the ground at the corner of a building on the road through the fort. Visible as a cylindrical metal object rising

roughly 4 feet vertically out of the ground and painted the same grey colour as the nearby railings, it is generally unnoticed by most people who pass. From the early 1880s until 1900 it was mounted with 2 others on the roof of the casemated billet block at the entrance. What makes this gun important is that it is one of only a few surviving examples of a weapon that represents the first significant change in artillery design in 400 years. RBLs were revolutionary, prior to their appearance, guns had been heavy, smooth bore & muzzle loading, like a cannon. But with the new designs, barrels were rifled to impart a spin on the projectile, improving accuracy. They were constructed of separate layers of wrought iron engineered to handle more powerful charges to propel heavier projectiles further. Loading was from the rear through a specially designed breech mechanism allowing the crews to remain in cover behind the weapon.

The gun's present location today.

Designed and manufactured by British Engineer William Armstrong, they came in 6 different sizes but the 7 inch, designed for use on warships, was the largest. They were put in service with the Navy in 1861. While accurate and powerful, the complicated breech mechanism proved to be difficult and dangerous to operate and the increased number of moving parts were prone to wear. In 1870 it was decided to remove breech loading guns from ships, and most of the 7inch RBL guns were removed to Coastal Fortifications. Breech loading guns would not appear again until toward the end of the 19th Century.

This gun is believed to be an early example of the type, one of only 76 guns with an unreinforced breech that weighed 72 cwt (3,150Kg). It first appears on the Fort Camden armament list in 1887. The gun would have sat on a fixed wooden carriage that could pivot about its muzzle allowing it to keep aim on ships as they progressed into the harbour towards Spike Island. Firing through one of the small embrasures that can be seen on top of the casemated building, it was supplied from two semi subterranean magazines nearby. In 1900, the 7inch RBLs along with the other Victorian guns became obsolete and were buried as bollards to help winch equipment around the hilly site. Most of the Victorian guns are now gone from Camden Fort Meagher but this 7-inch RBL remains in the place it was buried. One of only a handful of its type left today it is a rare and important piece of Victorian artillery.

Museum 16

Dunmanway Heritage Centre
Chapel Street, Dunmanway

Website:
www.dunmanwayhistoricalassociation.com
Email:
info@dunmanwayhistoricalassociation.com
Tel: 023 8856508
Eircode: P47 C803

Located in Dunmanway, the Heritage centre is attached to the former Methodist church. The centre was founded by the local Historical and Cultural Association and the information displays are both well researched and informative. A market town with a substantial population in the 19th and 20th centuries, Dunmanway was a centre of economic and political activity in the West Cork region. Display boards tell stories of some of the town's most famous inhabitants including Sam Maguire, after whom the All-Ireland Football Final cup is named. The town also played a vital role in the War of Independence and Civil War period. The centre features archival material available for consultation, and so has become a firm favourite with genealogical researchers.

While there is not a gift shop, a small number of local history publications are available to buy on site. Most visitors spend about an hour here. There are cafes in the nearby town and ample parking in the area. The centre opens 10-3.30pm Monday, Tuesday, Thursday, and Friday in season, but opening times do vary so check before you travel.

Dunmanway Heritage Centre exterior.

Interior of the heritage centre.

Museum 17

West Cork Heritage Centre Bandon
North Main Street, Bandon

Website: www.westcorkheritagecentre.com
Email: westcorkheritagecentre@gmail.com
Tel: 023 8844193
Eircode: P72 KT52

This museum is jam packed with fascinating artefacts and memorabilia. Housed in the former Kilbrogan parish church, dating from the 17th century, and incorporating a section of the town wall in the grounds, the museum has a wealth of information on the town and the area. The collection of artefacts focuses on Bandon's history as a plantation walled town that had its own mint (Artefact 76), the role of planters and of course the influence of Lord Boyle and the Duke of Devonshire, who owned the settlement from the mid-1600s. The exhibitions, made up of cased artefacts, replicas, and information signage, include rooms that recreate various aspects of local life through the last four centuries. Be careful to behave or you might be put in the old town stocks which are on display here! Visitors can also see replicas of an old shop, school, kitchen and forge.

West Cork Heritage Centre Bandon as viewed from North Main Street. Image courtesy of Eoghan Nelligan.

Interiorof West Cork Heritage Centre. Image courtesy of Alexis Bolster.

The museum is open from May to September, Monday to Saturday 10am-5pm, and Sunday 2-5pm. It is open from October-April by appointment. There is a nominal fee for entry. Most visitors spend about an hour here. The nearby town has plenty of shops and cafes. Parking is on the nearby streets or in carparks closer to the river.

ARTEFACT 90

Town Stocks. Image courtesy of Alexis Bolster.

Name: Town stocks
Material: Wood
Location: West Cork Regional Museum Bandon
Date: 17th century
Period: Early modern

Stocks are a restraint system used in the carrying out of punitive punishments, which were introduced in the mid-13th century. Stocks were established by King Henry III of England as a method of punishment. Stocks could be feet restraint stocks or, like this example, could restrain hands and head. The person in stocks would be held in an uncomfortable and even painful bent back position. The town stocks were typically located in public and visible places, such as at a market square or important crossroads or outside a courthouse. Being placed in stocks was a form of public humiliation - a person locked in stocks was not only denied food and water, they also often had refuse or even stones thrown at them and may have been subject to physical assault such as hitting with a switch. Defendants convicted of offences such as drunkenness, vagrancy, stealing, seditious works, attempted sodomy or extortion often ended up in the stocks where a crowd would gather and show their disapproval by throwing rotten eggs, rotting vegetables, blood from the slaughterhouses and more! Time spent in the stocks varied from hours to days. For example, drunkenness–6 hours, swearing–1 hour, vagabonds–3 days. The stocks could be avoided if the accused could pay the fine for the crime committed. By 1351 A.D. every town was required to have and maintain stocks. After 1816 use of the stocks was restricted to perjury and subordination. The stocks remained in use until 1872. The comic image we have in our heads of a petty criminal being hit with rotten fruit is far removed from the reality of this severe punishment.

Museum 18

Kinsale Regional Museum
Former Market House, Kinsale

Website:
http://homepage.eircom.net/~kinsalemuseum
Tel: (021) 477 7930
Eircode: P17 D962

This fascinating museum has a lot to offer to locals and visitors alike, set in the medieval core of the town of Kinsale. Kinsale, an important port town on the south coast, retains a strong sense of its historic character, with narrow winding streets meandering around historic buildings facing out to the port still teaming with boats. The town contains several interesting visitor attractions including the nearby medieval Saint Multose Church. The museum is set in the former Courthouse/Market House, dating back to the 1600s. The building is distinguished by slate covered Dutch gables, a very rare survival and an important architectural detail that contributes significantly to the streetscape. It was in this building that the Kinsale Town Corporation and its sovereign conducted their affairs, and the Courthouse was also used for ceremonial occasions in the 18th century as well as the Lusitania Inquest in the 1910s. Kinsale Museum holds a large collection of maritime artefacts, although with limited space it cannot display its full collection. The museum tells the story of the development of the town with an emphasis on maritime trade and commercial life. Information panels support glass cased artefact collections. There are several thematic displays, for example a display on weights and measures used when the building was a market house, and a separate section on the Lusitania including a deck chair from the ship.

The exterior of Kinsale Regional Museum.

There is a variety of fascinating exhibits within the museum.

The museum is free to visit, owned by Cork County Council and run by volunteers, open seasonally (mornings only) five days a week (closed Monday and Sunday). Opening times can vary so check before you travel. Most visitors spend about an hour here. There are plenty of places to eat in the nearby streets, and parking is available in a selection of carparks and street parking spaces (paid) in the town.

ARTEFACT 91

Name: Penal cross
Location: Kinsale Regional Museum
Material: Wood
Date: 1700s
Period: Modern

Penal Cross on display.

Penal crosses are devotional artefacts and were used in Penal times in the 17th and 18th centuries. The penal laws were a series of laws enforced by the British Government in Ireland, mainly in the 1700s, that were aimed at the suppression of the Roman Catholic church. The penal cross is an important artefact from this period, a small portable relic of worship for Catholics whose religion was under great threat. Penal crosses were carved from wood, as this was a cheap and widely available material that could be procured and processed locally. The simple carved detailing on this small object is typical of crucifixes of this type and date, with a simplified figure carved in relief, and details such as a halo incised on the body of the cross behind. The polished finish to the carved figure probably represents many years of use, and was created by the oils from the owners hands rubbing into the wood. This small simple artefact has a great deal of personal meaning.

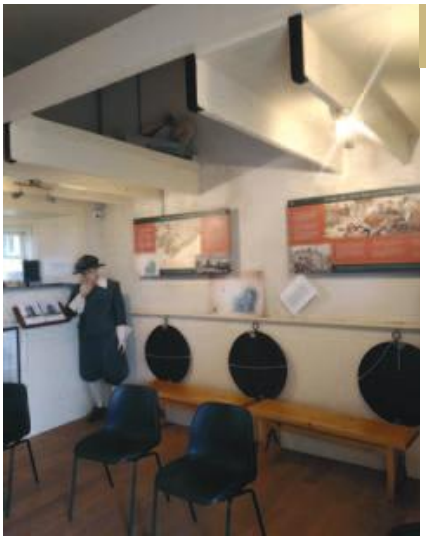
Museum 19

Lusitania Museum and Old Head Signal Tower
Old Head, Kinsale

Website: www.oldheadofkinsale.com
Email: info@oldheadofkinsale.com.
Tel: (021) 419 1285
Eircode: P17 T683

The Lusitania Museum and Old Head Signal Tower is a community led development by the Lusitania Museum/Old Head Signal Tower Heritage CLG. The museum is set in a restored signal tower, constructed between 1804 and 1806. There were 81 signal towers like this built in Ireland during the Napoleonic wars, in response to the threat of a French invasion, but the Old Head signal tower, no. 25, is the only one to be restored and open to visitors. The viewing platform on the roof affords panoramic views of the surrounding landscape and sea. It is an ideal point from which to view nearby protected bird colonies. Outside the tower, the Lusitania Memorial Garden with a 20 metre long " wave " sculpture tells the story of the Lusitania's final voyage. It contains the names of all those on board when the ship was torpedoed on May 7th 1915. The wreck of the Lusitania lies 21 kilometres off The Old Head, 90 metres below the waves. The previous owner, Mr. Gregg Bemis, gifted the wreck to Lusitania Museum/Old Head Signal Tower Heritage in 2019. The Lusitania Museum, currently in design phase, is at present just a small display with a selection of artefacts and information panels. The museum proper will be created around a display of artefacts recently recovered from the wreck. It will combine traditional information panels with modern multi-media technology.

Exterior of the old Signal Tower, Old Head of Kinsale.



Lusitania Museum and Old Head Signal Tower interior.

A visual display in the grounds of the Signal Tower.

The Lusitania Museum and Old Head Signal Tower is fee charging, the project is voluntary and relies on donations and earning from admissions to fund restoration works. Kinsale marks the start/end of the Wild Atlantic Way touring route. The museum has a small café, parking is available nearby. The Signal Tower roof platform is not wheelchair accessible. Opening times vary so check before you travel, most visitors spend about an hour here.

ARTEFACT 92

Name: Wooden step
Location: Lusitania Museum and Kinsale Signal Tower
Material: Wood
Date: 1915
Period: Modern

Lusitania Step.

This step was recovered in a fishing net by Maurice Fitzgerald, skipper of the MFV Blue Diver, in the 1970s. It was confirmed to be from the Lusitania when, in the 1980s, a sonar tow survey was carried out in the area, identifying the wreck site. The wreck lies 93 meters below the ocean surface, about 12 miles off the Old Head. The sinking of the Lusitania by torpedo in May 1915 resulted in what was one of the greatest catastrophes of the First World War. This small fragment of the wreck has real meaning to the families of victims who visit the exhibit. The wooden step, just over 100 years old, retains some of its green paint along with some fitting details. It is protected in a Perspex case.

Museum 20

Allihies Copper Mine Museum (ACMM)

Allihies, West Cork

Website: www.acmm.ie
Email: allihiesparishcoop@gmail.com
Tel: +353 27 73218
Eircode: P75 Y329

Located in the scenic village of Allihies, in west Cork, this fabulous museum occupies a former Methodist chapel, built in 1845 for Cornish miners working in the nearby copper mines. The museum is open from Easter to October, has the option of guided groups or unguided, and is fee charging. There is plenty to keep a visitor interested for 1-2 hours. ACMM, which was established by the local community, is a registered charity, and all income is used in its day-to-day operation and for further development. There is a café and small shop on site, and the Allihies Copper Mine Trail complements the museum experience. During the summer season the Cafe and Gallery walls are hung with works of art for sale highlighting local, national and international artists. Nestled between the Sliabh Mioscais and the Atlantic seaboard, the area provides many opportunities for discovery, cultural exploration, and outdoor adventures.

Copper mining started in Allihies in 1812 A.D. when John Puxley, a local landlord, found that the large quartz outcropping at Dooneen was copper bearing. Shafts were sunk into the mountain in 1821 and by 1823 an engine house was erected to house a steam engine brought over from Cornwall to pump water from the depths. The museum tells the story of the ways in which the local geology shaped the development of the town and area. The history, social impact and engineering significance of the nearby mines and engines are explored in detail. The collection includes artefacts, photographs, archive documents, illustrations, diagrams, maps and text panels. There is also a selection of large-scale models and interactive elements.

One of the displays within the museum.

Allihies Copper Mines Museum is housed within an old Methodist church

ARTEFACT 93

Name: Allihies stamp engine heads and gears
Location: Allihies copper mine
Material: Iron
Date: late 19th century
Period: Modern

A stamp mill or stamp battery is a type of mill machine that crushes material by pounding it with hammer-like metal heads. The heads are attached to heavy timber beams that are held vertically suspended from a horizontal rotating shaft. An engine or water wheel moves the shaft lifting the beams and dropping them down again. The stamp head falls on the ore below and smashes it into smaller and smaller pieces. The method is nearly as old as the waterwheel itself, but the sophisticated machines used in Allihies are based off the Cornish Stamp, developed in Cornwall for use in the tin industry in 1850, that made use of a water box to carry away waste product.

Engine Head.

This stamp hammer head and associated gears were salvaged from the pebble beach at Dooneen. It was part of a set of stamps driven by a steam engine. These machines were used to crush the copper ore mined from the mountains down into tiny particles, the fine quartz pebbles could then be separated from the pure copper ore. Before the installation of stamp engines at Allihies the grinding of ore was carried out by hand, by women and children using hammers and anvils. The installation of this machine would have saved families many hours of hard labour, but at the same time the machine probably put a lot of people out of work. The machine would have been a controversial addition to mines.

The white sand beach at Ballydonegan is a man-made beach created from the quartz sand by-product of copper mining at Allihies. The beach gives some idea of the sheer scale of the operations, and the ways in which nineteenth century industrialisation changed the very landscape of this area.

Museum 21

Bere Island Heritage Centre

Derrycreeveen, Bere Island

Website: www.bereisland.net/bere-island-heritage-centre
Email: bipginfo@gmail.com
Tel: 027 75099
Eircode: P75 W660

Located in the former Ballinakilla National School, and run by volunteers from the island's residents, Bere Island Heritage Centre opened in 2010. Artefacts and photos tell the story of life on the island, highlighting the challenges faced by those who lived in the challenging environment as well as the island's strategic military importance. The displays cover aspects such as British military fortification, the internment camp where Irish revolutionaries were interned during the War of Independence, and folk life and fishing, as well as the history of the school in which the centre is located. The centre also features archival material available for consultation, including the old school rolls, and regularly features craft fairs and workshops as well as cultural events.

The Bere Island Heritage Centre.

Interior.

Museum 22

Bantry Museum
Bantry, West Cork

Website: www.bantryhistorical.com/museum
Email: bantryhistorical@gmail.com
Eircode: P75 TC64

Bantry Museum is a hidden gem, located behind Bantry Fire Station off Wolfe Tone Square, in the heart of Bantry Town, West Cork. Bantry is a beautiful harbour town that combines the charm of a fishing village with the benefits of a modern harbour. The town spreads out from the harbour around a large open square, frequently hosting farmers markets and antiques fairs. The streets of Bantry town are full of character with old and new shopfronts, some with historic interiors. Heritage Information panels which detail the historical importance of different places and people can be found about the town.

This small museum was established by Bantry Historical and Archaeological Association, and centres on a mixture of historical facts and local folklore. Among the displays are furniture, kitchen utensils, crockery and other items from domestic life in Bantry long ago. Information panels, newspapers clippings and photographs illustrate interesting details and trivia. There is a specific section on the failed French Armada invasion of 1796, accompanied by the Irish patriot Wolfe Tone, from whom the square derives its name.

The museum is open from June to September 10.30 to 16.30 Monday to Friday. There is no admission charge. The small building has steep steps and access may be difficult for some visitors. There is plenty of parking around the nearby square and several shops and cafes within easy walking distance. Bantry House is nearby for visitors who want to continue their heritage adventure.

Exterior of Bantry Museum.

Interior of Bantry Museum.

ARTEFACT 94

Name: Fishing net making needle
Location: Bantry Museum
Material: Wood
Date: 1900s
Period: Modern

Fishing Needle.

County Cork's long coastline has meant that fishing and coastal foraging has always been important here. In coastal areas, fishing net making and repairing was part of everyday life for hundreds of years, by the modern period it had become a major industry. The Bantry area has several buildings called fish palaces. These exotically named structures were used to extract oil from pilchard, before being exported to the Iberian Peninsula. In addition to exportation of processed fish, the oil that was extracted was in high demand as a luminant and in various industries such as the tanning industry. Pilchards were typically caught in the summertime in Irish waters but there were years when they did not appear. The pilchard fishing industry went into decline by the middle of the 18th century when the shoals became depleted through overfishing. After this time other fish stocks such as hake, herring, sprat and mackerel took over. By 1821 records show that 1,162 people were employed in the fishing industry in Bantry, at a time when the population was estimated to be only around 4,275. In 1837 the fishing was primarily focused on mackerel and it was recorded that there were 24 hookers. Fastnet Fisheries, a company owned by local man G.W. Biggs, had 6 ocean going trawlers in more modern times but by the 1950's the bay had been depleted of its fish stocks.

This example of a netting needle from Bantry represents this important industry. Net was made using twine, a block of wood called a lace and a wooden needle like this. The needle was threaded with twine and gripped in one hand, while the lace was held in the other hand. The twine was stretched across to the lace and secured with knots creating a grid. This continued until the net took shape - it could be made to any size or shape. This needle would once have been a very common sight in the town, every home that had any connection to the fishing industry would have had a collection of them. They would have been used by men, women and even children.

Museum 23

Michael Collins House

Emmet Square, Clonakilty

Website: www.michaelcollinshouse.ie/visitors-info
Email: info@michaelcollinshouse.ie
Tel: (023) 885 8676
Eircode: P85 D235

Michael Collins House is a museum dedicated to Irish patriot and revolutionary hero, Michael Collins, run by Cork County Council. The museum is based at 7 Emmet Square, the square where Michael Collins lived between 1903 and 1905. This building came into the ownership of the County Council in 2015 inspiring the idea of the museum. The building has been fully restored and exhibitions are a mixture of interactive displays, audio visuals, information panels, cased artefacts, and reconstruction models. There is the option of a guided tour. The museum tells Michael Collins' life story, entwined with the history of the fight for Irish independence. The collection includes a memorial card and newspaper clipping for Marianne Collins (Michael Collins' Mother). The memorial card, with the wrong age at death, is corrected underneath in Collins' own handwriting. Information on local revolutionary patriots such as Tadhg an Asna who led the local forces into battle in 1798, and Fenian, Jeremiah O'Donovan Rossa, both of whom influenced the young Collins, is also presented.

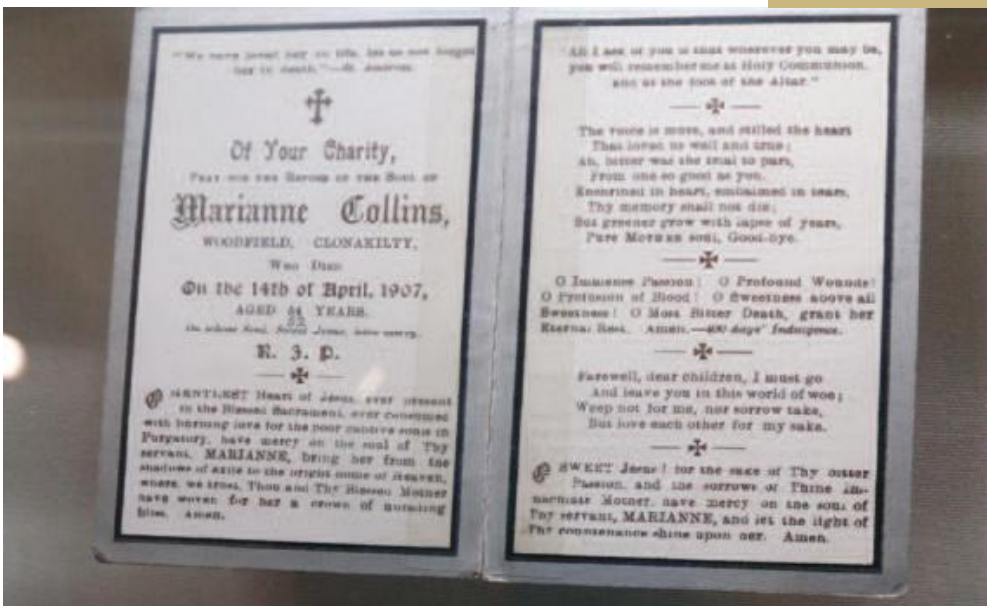
The museum is open from Wednesday to Saturday, and there is a nominal fee. Advance tickets can be booked online and there is student, senior, child and group discounts. The museum is fully wheelchair accessible. Visitors generally spend about an hour, people with more interest can find enough to keep them here for about 3 hours. For a full day out, guests can move on to the nearby West Cork Heritage Centre, also in the town, or Michael Collins Centre at Castleview just outside Clonakilty. Another option is the Michael Collins Trail. There is free street parking on Emmet Square and the surrounding streets. There are ample cafes and restaurants in the nearby streets, or visitors can have a picnic in Emmet Square park outside the museum.

Exterior of Michael Collins House.

ARTEFACT 95

Name: Marianne Collins Memorial Card
Location: Michael Collins House, Clonakilty
Material: Paper
Date: 1907 A.D.
Period: Modern

Marianne Collins Memorial Card.



Today, we often see death as the last taboo subject, and rarely talk about it, instead remembering people by photos and stories of them when they were alive. In the past, when death rates were very high, mortality was too frequent and familiar to be denied like this. Memorializing people at the point of death was more normal. Post-mortem photography was very popular as were memorial cards, and these items related to the funeral were often seen as the most fitting memento of a loved one. Typical of the period and a tradition that continues throughout Ireland to this day, memorial cards with the name, and often a photo, of the deceased accompanied by prayers, poetry or other messages of remembrance are quite common. What makes this specific memorial card less common is that this person, Marianne Collins, was the mother of Irish revolutionary hero Michael Collins and this, his personal copy, was one of his most prized possessions.

Marianne Collins was a formidable woman who raised eight children while running a sizeable farm. Her husband, almost forty years her senior, died in 1897. Marianne Collins (nee O'Brien) died on the 14th of April 1907 after a long battle with ill health, she was just 52 years old. Michael, then aged just 16, had moved to London less than a year previous. Collins was left devastated by the loss of his mother, and indeed both his parents, at such a young and formative age as he began his new life in London. He kept this memorial card in an envelope,

accompanied by a well-worn newspaper clipping of Marianne's eulogy and a poem written in her memory. Collins is said to have even brought this along in his breast pocket when he returned to Ireland to take part in the 1916 Rising.

The envelope in which it is held is as worn as one would expect, discoloured, torn and stained with 'M A O'Brien Collins' in red ink and 'Mothers Funeral + Mass Cards' in Collins' hand in black ink. The card itself was printed in Dublin by 'Mortuary Card Printing Co.' on Lower Sherrard St. Dublin and it is a typical design of the period, white card with black text and a silver and black frame. The silver frame and the fold over design would have been a more expensive option at the time. Marianne, like many people of this period, was a religious woman of the Roman Catholic faith, her memorial card reflects this with several different prayers offered in her honour. Interestingly, Marianne's age on the card is incorrect and is crossed out and corrected underneath in pencil, reportedly by the 'ever sentimental, ever meticulous' Michael Collins. The newspaper clipping is a full-page clipping including a report of Marianne's funeral and eulogy. It also features a poem dedicated to Marianne written by the newspaper owner/editor and her son-in-law, Patrick O'Driscoll. Apart from the obvious familial connection here, Marianne had also provided financial support for the setting up of the paper, 'The West Cork People'.

Michael Collins is well known as the charismatic politician, I.R.A. Director of Intelligence and Commander in Chief of the Irish Free State Army but this particular artefact gives us a greater insight into the real Collins. It shows a more fragile and humane side to the usual formidable character often portrayed in biography and popular media. Even as Collins took part in the 1916 Rising; lead as the I.R.A. Director of Intelligence and the Minister of Finance during the Irish War of Independence, negotiated the Anglo-Irish Treaty and commanded the Free State Army during the Civil War, the memory of his mother, was literally, never too far from his heart.

Museum 24

West Cork Regional Museum
The Old Methodist School,
Western Road, Clonakilty

Tel: 023 8833115
Eircode: P85 YY48

Located in a former Methodist school, this great little museum features a diverse range of artefacts and photos relating to the busy market town of Clonakilty and environs in the 19th and 20th centuries. The charming little building, dated 1887, has an unusual polychrome effect created by the use of contrasting coloured stones. It retains a strong sense of its original historic character. Run by a voluntary committee, the museum exhibition ranges over the three former school rooms.

Exterior of West Cork Regional Museum.

It focuses in particular on notable Clonakilty inhabitant Michael Collins as well as the War of Independence, O'Donovan Rossa, rural life, the postal service, the G.A.A., and West Cork railways. There are military uniforms, some exquisite pieces of locally produced lace and crochet on display as well as a fascinating exhibition on the home life of women over the years.

Opening times vary because the museum is dependent on volunteers, so it's best to contact before you travel. There are plenty of shops, cafes and restaurants in the nearby town, and ample parking on the streets nearby. Most visitors spend about an hour here. People who want to continue their Heritage adventure should stop by nearby Michael Collins house or explore the Michael Collins Centre just outside the town.

Interior.

ARTEFACT 96

Name: Spinning wheel
Location: West Cork Regional Museum Clonakilty
Material: Wood and iron
Date: c. 1850
Period: Modern

Spinning Wheel.

This spinning wheel was used to turn fibre into thread or yarn, which was then woven into cloth on a loom. It replaced the hand spinning with a distaff or stick and would have been operated by a single person, most often a woman. Important cottage industries were created from this practice and Clonakilty was known for the manufacture of linen, and to a lesser extent cotton. In 1837 the linen industry with its 400 looms provided employment to 1,000 people and weekly sales in the region of £300. The industry had the support of the Government in Dublin, who wanted to promote industrial development outside the capital to reduce agitation for workers unions. Within the town, a Linen Hall was erected by the Earl of Shannon to facilitate dealers in conducting their business.

The large wheel that survives in this object would have been turned by a drive shaft connected to foot treadle. A dive band leading off the wheel would have connected to a flyer, when the wheel spun the flyer turned rapidly imparting a twist to linen fibres turning them into threads. At the same time a bobbin, connected to the flyer, would have wound on the thread.

Museum 25

Rathbarry Museum
Rathbarry, Castlefreke, Clonakilty,
Co Cork

Website: http://homepage.eircom.net/~rathbarry/museum.htm
Email: rathbarrytt@gmail.com
Eircode: P85 E165

Rathbarry museum is a treasure-trove of memorabilia and artefacts from the nineteenth and early twentieth centuries and is well worth a visit. Rathbarry is a tiny but very appealing village on the coastline between Clonakilty and Rosscarbery. The settlement held a 'Sprigging School' - a lace school established by Lady Carbery in 1825, a time when there was a worldwide revival in the art. The lace made in Rathbarry is known as sprigging lace because it was shaped like a sprig or spray. The school was used to create much needed employment during the Famine and was located in a tiny stone cottage built by the Carbery family and restored in recent years by the Rathbarry community. The Carbery family were the main landlords, once holding the title Lord Freke, and their legacy is further remembered in places such as Lady Carbery's well and Castlefeke house near to the village.

Rathbarry Museum.

Interior.

Sprigging school.

The museum is set in a small gabled building, located adjacent to the post office and shop. It illustrates the life and events of the past in the rural area including a small section on sewing. A hearth display contains a fire-crane with hanging pots and even a rotary bellows - a once ubiquitous feature of Irish rural cottages used to force air under the fire helping to maintain a strong flame. A display of horse fittings and tack, carefully hand labelled, portrays another important aspect of rural life. Visitors will enjoy exploring the small museum and squirreling out information from small panels, photographs, and newspaper clippings. Visitors spend anything from half an hour to half a day here, depending on their interest. The display is on a single level and is wheelchair accessible. Opening hours vary so do check before your visit.

Horse tack.

ARTEFACT 97

Name: Horse tack
Location: Rathbarry Museum
Material: leather, iron
Date: 1900s
Period: Modern

The museum has a fine selection of horse tack, harnesses and fittings, echoing back to when the horse was King. Before the invention of the motorized vehicles, horses, ponies and donkeys were the engine in countryside and the town.

On display are the main parts of the harness - the blinkers that went around the horse's head to which the long reins were attached, the padded collar (in centre) was used to distribute the load around a horse's neck and shoulders to make pulling a wagon or plough more comfortable. The collar supported a pair of curved metal pieces, called hames, to which the traces, which attach to the cart or plough, of the harness are attached and the driving saddle (top left) on which the chain of the cart rested. Tackling the horse took a bit of time and was often one of the children's chores.

Museum 26

Iarsmalann Chléire
(Cape Clear Museum)
Lis ó Móine, Oileán Chléire, Baltimore

Website: http://capeclearmuseum.ie
Email: cccteo@iol.ie
Tel: 353 (0) 2839119
Eircode: P81 XW72

Established in 1981 as a voluntary organisation, this small but much-loved museum aims to organise the collection of artefacts relating to the folk, farm and maritime life on the island, source, collect and preserve records relating to the island and residents, and develop an exhibition to educate visitors. The museum is set within a restored old stone schoolhouse. Interpretative exhibition panels cover island settlement patterns, folk and farm life, genealogy, folklore, placenames, education, telegraph and maritime history. Archaeological, botanical, ornithological and genealogical surveys of the island have been undertaken and data relating to these aspects is either on exhibition or housed in the Island Archive. The large collection of information panels are regularly changed and updated to maintain the interest of repeat visitors to the site. Past themes have included Boatbuilding and Shipwrecks, Hedge Schools, Placenames and Folklore, Archaeology and History, Early Lighthouses, Telegraphs, Postal and Ferry Services, Sailing, Fishing and South Pole and Falkland Island adventures. The museum is set around informal display cases of artefacts, larger replica pieces, historic furniture and photographic exhibits.

The museum is open daily from June to early September, arrangements can be made for groups to visit the centre at other times by advance booking. There is a small bookshop on site. Steps at the entrance to the museum means that some visitors may find access difficult.

Exterior.

Recollecting the past in Cape Clear Museum.

Museum 27

Skibbereen Heritage Centre
Old Gasworks Building, Upper Bridge Street, Skibbereen

Website: www.skibbheritage.com
Email: info@skibbheritage.com
Tel: 028 40900
Eircode: P81 WK06

This brilliant museum is a great place to wile away a rainy afternoon in West Cork. The heritage centre opened in 2000 as a result of a joint venture between Cork County Council, Skibbereen Urban District Council, the OPW and the Heritage Service. The restoration of the Old Gasworks has won an architecture award. The exhibition includes artefacts, photos, videos and information plaques that tell the story of this West Cork market town and fishing port. Skibbereen suffered particularly badly during the Great Hunger (An Gorta Mór) and a particularly powerful aspect of the exhibition is the display relating to the Famine period. The exhibition also covers features such as life in the town and hinterland in the 19th century, local rebel O'Donovan Rossa, the War of Independence period, local graveyards including the Famine graveyard at Abbeystrowry, as well as information on nearby Lough Hyne, Ireland's first marine nature reserve and former stronghold of the O'Driscolls.

Skibbereen Heritage Centre embraces modern technology, they have commissioned a TV documentary, published books and even created a walking trail phone app. The centre has digitalised a database of over 350,000 genealogy records, many of which are accessible on their webpage. Archival material relating to genealogical research is also available for consultation and the centre is a firm favourite with family historians.

Exterior.

Interior.

The centre is open May to September, Monday to Saturday, 10am-5.30pm and in October it is open Tuesday to Saturday, 10am-6.00pm. Booking for groups outside normal opening hours is possible by contacting the centre. Pre-booked groups can avail of a personalised guided tour of the Famine Exhibition, tailored to cater to all ages and levels of interest. Admission for adults is €6, with concessions for older people, students, children and families. There is plenty parking on site and the centre is wheelchair accessible.

ARTEFACT 98

Name: Soup pot
Location: Skibbereen Heritage Centre
Material: Iron
Date: 1840s
Period: Modern

Soup Pot.

The Great Hunger (An Gorta Mór) of the 1840s is one of the darkest periods in Irish History. The population of the country took a long time to recover from the devastation wrought by starvation and emigration. The Skibbereen Union area suffered one of the biggest losses of any union in the country, with over a third of the population being lost. Horrific reports from the Skibbereen area featured in the media of the time as it became infamous for the suffering endured by its people. As early as 28 October 1845, Dr. Dan Donovan, the famous Famine doctor, reported that "one third of the entire crop was lost" and the area very quickly descended into chaos as society broke down. The Old Steam Mill in Skibbereen, built in the 1780s, went on to house one of the first large-scale Famine Soup Kitchens in Ireland in response to the starvation experienced in the 1840s. The soup kitchen opened on 7 November 1846 by the Skibbereen Committee of Gratuitous Relief, and at its height of operation, some 8,600 starving people were fed daily from its kitchen. Massive pots, like this one, were used to cook the soup. The government recommended 'Soyer Soup', a meal of beef, water, pearl barley, onions, flour, salt and brown sugar, but it was declared unsuitable by Dr. Donovan, who devised his own unspecified variation. It was probably the latter recipe that was most served from this pot.

Museum 28

National Museum of Ireland – Archaeology
Kildare Street, Dublin

Website: www.museum.ie/en-IE/Museums/Archaeology
Email: info@museum.ie
Tel: 0 1 677 7444
Eircode: D02 FH48

The National Museum of Ireland-Archaeology specialises in Irish and other antiquities dating from the Palaeolithic Stone Age period to the late medieval period. The fine museum building was designed in a Palladian style by the Cork architects Thomas Newenham Deane and his son Thomas Manly Deane in the 1870s. It is part of the houses of parliament buildings, so photography is not allowed inside the building. The museum treasury room contains a fantastic display of bronze age gold including famous Irish objects central to national identity such as the Broighter Hoard alongside some of the gold artefacts from Cork discussed in this book. The large medieval metalwork collection is also amazing, and includes the shrine of Saint Laichtin's Arm, from Donoughmore. The many shrines and objects of medieval religious significance continue to be foci of veneration for their exquisite artistry and symbolic importance.

An internationally-renowned exhibition includes the world-famous Iron Age 'bog bodies', immortalised in the poetry of Seamus Heaney. These individuals are believed to have been high-status victims of ritual sacrifice. There is also the breath-taking Lurgan canoe, a bronze age vessel which is the largest artefact on display at 15m long. Numerous other prehistoric

Exterior.

artefacts relating to war, ritual, religion, daily life, agriculture and food procurement, architecture and crafts can be seen. There are also substantial collections of Viking artefacts, accompanied by information outlining Dublin's Viking origins. Antiquities from Ancient Egypt, Cyprus and the Roman world, collected in the early days of the museum's foundation, are also on display.

The museum offers a year-round programme of workshops, talks and tours for all ages and a changing programme of temporary exhibitions on historical and contemporary themes. Visitors typically spend half a day here, there is a café and giftshop. The museum is fully wheelchair accessible. There is very limited parking in this area of Dublin, so use public transport or walk if you can. Admission is free and the museum is open all year. From Tuesday to Saturday it is open 10am-5pm and from Sunday to Monday 1-5pm.

Museum 29

National Museum of Ireland - Decorative Arts and History
Collins Barracks, Benburb Street, Dublin

This branch of the National Museum is located in Collins Barracks, a former military barracks in the Arbour Hill area of Dublin that is remarkable in itself for its military architecture. Two contrasting but equally fascinating collections are housed within Collins Barracks: decorative arts and history.

Website: www.museum.ie
Email: info@museum.ie
Tel: 0 1 677 7444
Eircode: D07 XKV4

Collins Barracks.

The decorative arts element includes items of silver, ceramics, glassware, furniture, clothing, jewellery and coins. Particular highlights include the 'Eileen Gray' exhibition, tracing the life and work of the renowned 20th century designer. Another highlight is the Irish Silver Gallery, which contains one of the largest collections of Irish silver anywhere in the world and explores the development of the silversmith's craft through the centuries. The museum is also home to the Albert Bender collection of Asian art, which includes the Fonthill Vase, made between 1300 and 1340 A.D. and believed to be the earliest documented piece of porcelain to enter Europe from China. An exhibition closer to home is 'The Way We Wore', an exhibition of clothing and jewellery worn in Ireland from the 1760s to 1960s.

The military history collection includes the exhibition 'Soldiers and Chiefs' which traces Irish military history from 1550 into the 21st century. Another highlight is the Asgard Yacht, built in 1905 and used in the 1914 Howth gun running.

Workshops, cultural events, lectures, and tours are held regularly in the museum. There is a changing programme of temporary exhibitions in addition to the permanent exhibitions. The displays change with great frequency and variety due to the large nature of the collection in storage on site. There is also a café and gift shop onsite. Most of the site is wheelchair accessible. Admission is free and opening hours are Tuesday to Saturday, 10am-5pm, Sunday to Monday, 1-5pm. Parking in the area is limited, so use public transport or walk if you can. The Museum is on the Luas line and is walking distance from Heuston Train Station.

ARTEFACT 99

Name: Youghal Lace
Location: National Museum of Ireland- Collins barracks
Material: cotton
Date: 1906 A.D.
Period: Modern

On display in the National Museum of Ireland is an exquisite example of Youghal Lace – a collar of flat needlepoint lace worked in a bold floral design with fine decorative filling stiches, the brides enriched with loops and picots. The collar was made by the Youghal Co-operative Lace Society and exhibited at the Royal Dublin Society's Art Industries Exhibition in August 1906.

Prior to the 1800s there was no lace making in Ireland. It was introduced by wealthy patronesses who saw it as a way to provide income for the deserving poor. It was the extreme hardship brought on by the Great Hunger that really led to the flowering of lacemaking in this country. During this period, many orders of nuns took on the mantle of promoting the lace industry - for instance Mercy nuns brought the art of lace making to Kinsale while the Poor Clare nuns brought it to parts of Kerry. In some areas, the lace school became advanced enough to invent and develop its own stitches and patterns. This very fine needle-lace is of a

Youghal Lace © National Museum of Ireland.

pattern known as Youghal Lace, developed in the Youghal school.

This lace style developed when a piece of lace of Italian origin came into the ownership of Mother Mary Ann Smith of the Presentation Convent in Youghal in the 1840s. A school of lace was established in 1852 as way to create local employment. Children in the convent who had shown an aptitude for the needlework were taught stitches Mother Superior Smith had learned from examining the cloth. After the death of Mother Smith in 1872, work in the Lace Room was carried on by Sister Mary Regis Lynch.

This lace is made entirely by the needle, and the thread used is of very fine cotton. Several medals were awarded to Youghal Lace in international exhibitions including the Vatican Exhibition in 1888, and several members of the British Royalty wore clothing made from Youghal Lace fabrics. The School continued to flourish until the advent of World War I. The nuns continued to make lace until the late 1950s.

Museum 30

National Museum of Ireland - Country Life
Turlough Park, Castlebar, Mayo

Website: www.museum.ie/en-IE/Museums/Country-Life
Email: info@museum.ie
Tel: 094 903 1755
Eircode: F23 HY31

This museum is located 8km north of Castlebar and is the only National Museum Branch outside of Dublin. The Irish Folklife Collection comprises over 35,000 artefacts, photos, videos, a specialist library and other archival material relating to the material culture of traditional ways of life in Ireland from 1850 to 1950 - objects that were used by a variety of people in everyday life. Themes covered by the exhibition include agriculture, architecture, boats, domestic life, fishing and hunting, furniture and woodwork, land transport, trades and crafts, sports, music, education and religion and ritual. A diversity of people is covered including men, women and children as well as special displays of Traveller culture. The exhibitions are housed in an architecturally impressive building incorporating Turlough House, designed by Thomas Newenham Deane and built in the 1860s. Turlough House was purchased by Mayo County Council in 1991 and, following renovations and construction of an adjacent museum building, the museum opened in September 2001.

The museum is fully wheelchair accessible and has its own parking, a shop and a café. There are temporary exhibitions in addition to the permanent display and cultural and learning events are regularly held. There is plenty to entertain younger visitors and the surrounding grounds are a great place for children to explore. Admission is free and opening hours are Tuesday to Saturday, 10am-5pm, and Sunday to Monday, 1-5pm.

The Museum of Country Life.

ARTEFACT 100

Name: Sciathóg
Location: National Museum of Ireland- Country Life, Mayo
Material: Willow
Date: 19th or 20th century
Period: Modern

Basket making is an ancient craft, that played a vital role in rural Ireland in the past. Baskets were made for carrying fuel, gathering food or catching eels or seafood, and many other things. Woven objects like this could be made in any shape or size, and every home in the country would have had a selection of baskets. Materials could vary based on locally available materials and the use of the basket; willow and hazel are common, but straw rope, rushes and reeds were also frequently used. These two beautiful sciathóg baskets are from Cork, the one on the left from Clonakilty and the one on the right with the straight side is from Béal Átha n'Ghaorthaidh. Meaning 'shield shaped' in Irish, Sciathógí were generally used as gathering baskets, easily rested on a hip and supported with one hand. Because the tradition was so unchanging and widespread it is difficult to accurately date baskets.

Chapter 13
Legal Protection of Archaeological Artefacts

The National Museum of Ireland

The National Museum of Ireland is the statutory body regarding the State's role in protecting the country's archaeological artefacts.

The mission statement of the Museum is: *'to collect, care for, manage and interpret the collections we hold in trust and make them accessible to everyone for inspiration, learning and enjoyment'*.

The Museum is the custodian of much of Ireland's artefact heritage. They encompass a broad range of disciplines, including archaeology, decorative and applied arts, history, ethnography, folklife and natural history. Together, these are the most extensive, valuable and complex multidisciplinary collections in the State.

The Museum has four public sites: three in Dublin – Kildare Street (Archaeology); Collins Barracks (Decorative Arts and History); Merrion Street (Natural History) and Turlough Park, Castlebar, Co. Mayo (Country Life). It also has a Collections Resource Centre at Swords in Dublin where much of its collection not on display is stored.

Legislative Role of the National Museum of Ireland

The chief legislation for the protection of archaeological artefacts is the National Monuments Acts (1930 - 2014). This has considerable impact on the work of the Museum. They establish the role of the Director of the National Museum of Ireland in asserting the State's ownership of archaeological artefacts that are found and which have no known owner. They also provide for the Museum's role as a regulatory body in Irish archaeology.

The Director has a consultative role with regard to the licensing of archaeological excavation and in relation to consents for the use of detection devices. These licences and consents are issued by the National Monuments Service section of the Department of Housing, Local Government and Heritage. The Museum is also responsible for the processing of licences for export and alteration of archaeological artefacts. The Museum is also involved with the Department in the formulation of Codes of Practice with major developers such as Transport Infrastructure Ireland, Bord Gáis and similar bodies, and in the drafting and revision of heritage legislation.

There is a statutory role for the Director under the Merchant Shipping (Salvage and Wreck) Act 1993 in relation to historic wrecks and archaeological artefacts from the sea. There is also an implicit role for the Museum with the Department of Housing, Local Government and Heritage in relation to a number of development acts such as the Gas Act 1976, Foreshore Amendment Act 1992, Harbours Act 1996, Dumping at Sea Act 1996, and the Turf Development Act 1998. The Museum also advises the Department in relation to applications for licences to dive on underwater sites with remains more than 100 years old, and on the placing and operation of Underwater Heritage Orders.

What is an "archaeological object"?

The term 'archaeological object' is defined in the National Monuments Acts 1930 to 2014 and has a broad meaning in terms of the type and age of artefacts it covers. Commonplace artefacts of relatively recent date, including 20th century material, may come within the terms of the definition regardless of their age. In general usage 'artefact' is preferred to 'object.'

What should I do if I find an archaeological artefact?

Under the terms of the National Monuments Acts 1930 to 2014, ownership of any archaeological artefact with no known owner is vested in the State. Anyone who finds an archaeological artefact must report it within 96 hours to the National Museum of Ireland or to a designated museum like Cork Public Museum.

It is also a requirement of the Acts that anyone who finds a wreck that is more than 100 years old lying on, in or under the seabed, or in land covered by water, must report the find within 96 hours to An Garda Síochána, the National Museum of Ireland or the Department of Housing, Local Government and Heritage.

What is the law on metal detecting?

The unauthorised use of detection devices to look for archaeological artefacts contravenes the law in Ireland, as set out in the National Monuments Acts 1930 to 2014. Such usage is subject to severe penalties, including imprisonment and/or fines. The categories of artefacts that are most commonly located by metal detectorists in Ireland, such as coins, tokens, buttons, clothes fasteners, thimbles, keys, seals, weights, strap ends and belt mounts, all fulfil the definition of 'archaeological objects' which may only be searched for under licence from the Minister for Housing, Local Government and Heritage. Therefore, it is advisable not to engage in any general searching for lost or buried artefacts as to do so may place you at risk of prosecution and also endanger the archaeological heritage by destroying the archaeological context of the artefact. It is also illegal to promote the sale or use of detection devices for the purposes of searching for archaeological artefacts.

Can I search for archaeological artefacts without a metal detector?

Unless you have a licence from the Minister for Housing, Local Government and Heritage, it is an offence to dig or excavate for the purpose of searching for archaeological artefacts, or anything of archaeological interest. It is also an offence to dive on a wreck that is 100 or more years old, or which is subject to an underwater heritage order, or to search for archaeological objects located underwater, without being in possession of a formal consent from the Minister.

The Care and Conservation of Archaeological Artefacts

The National Museum of Ireland is the State's repository of archaeological artefacts, and as such the care of all such artefacts must conform to National Museum of Ireland guidelines. The National Museum of Ireland sets out the requirements in this respect in their Advice Notes for Excavators, last updated in 2010. This specifies that archaeological objects must be "stored in a way that will not lead to any deterioration in condition," and cites guidelines on how this can be achieved by the Irish Professional Conservators and Restorers Association. These guidelines can be downloaded from the National Museum of Ireland's website under *National Museum of Ireland Advice Notes for Archaeological Excavators*.

The Local Authority Museums Network

The Local Authority Museums Network (LAMN) represents the twelve Local Authority Museums across the state that all play a vital role in the social, cultural and economic life of Ireland's regions. The LAMN's membership currently comprises of Carlow; Cavan; Clare; Cork; Louth; Donegal; Galway; Kerry; Limerick; Monaghan; Tipperary and Waterford. It is a national professional network of collections-based designated cultural institutions that advocates and promotes the diverse archaeological and historical richness of museums for the enjoyment and engagement of the communities they serve and the visitors they attract.

The Heritage Council's Museum Standards Programme for Ireland

The Museum Standards Programme for Ireland (MSPI) was established by the Heritage Council to benchmark and promote professional standards in the care of collections and to recognise through accreditation the achievement of those standards within the Irish museum sector.

Participation on the programme is open to:

(i) all established and eligible museums and galleries on the island of Ireland and

(ii) the custodians of eligible collections considering or seeking a more permanent and secure situation for their collection.

Standards are achievable and can be applied to museums of all sizes and levels of funding.

MSPI provides a series of workshops to support the achievement of these standards covering topics that include:

- taking care of and documenting a collection
- storing, displaying and exhibiting artefacts
- risk assessment and disaster planning
- visitor care and access
- museum governance and policies
- managing finances
- marketing, and
- developing an education policy.

In addition, the programme is complemented by a targeted post-graduate museum course which is supported by the Heritage Council and delivered by the University of Ulster.

Chapter 14
Conclusion: Working the Evidence

In this book we have tried to tell the story of the generations of people who have lived and died, worked and worshiped, in the area we now call County Cork by examining the artefacts they have left behind. From flint arrowheads thousands of years old, down to an old telephone exchange still in use not so long ago, is a long journey but each step along the way the artefacts have their own story to tell in their own way. This is what archaeology does; it tries to let "the mute stone speak."

Archaeological artefacts come in all shapes and sizes. Many are chance finds that were found in bogs, in ploughed fields, in all sorts of circumstances over the years. Not everything found in this way has survived and made it into a museum collection but enough was kept to frame the story of our past; or at least some of that story. Once professional archaeological excavation developed in the 1930s what can be learned from the study of artefacts goes up a level. Finds from an excavation are brought alive by placing them back in the "context" from which they were lost or thrown away. The bedrock of these excavations in the county is the Department of Archaeology in U.C.C. The State has also played its part with a range of excavations carried out in connection with conservation works at national monuments. Today, the bulk of archaeological excavations in County Cork are carried out as part of development programmes, most notably by Transport Infrastructure Ireland (*T.I.I.*). Private developers are also funding archaeological excavations and some of our featured artefacts come from that source. We hope this book givens a glimpse of how all these artefacts, discovered in all these different ways, tell the story of Cork's rich and varied past.

So, what have we learned from these artefacts- what do they tell us? One notch on a very old reindeer bone opens the possibility of a Palaeolithic presence in Cork. Was it made by that cut mark made by hunters some thirty thousand years ago butchering a reindeer they had caught in the North Cork tundra? Dr. Ruth Carden's work on the reindeer bones from the Castlepook cave excavations suggests that this was the case. If that is so, then there were people on this island twenty thousand years before the current evidence shows. To clinch the deal would be a stone tool used by these people in a securely dated context - nothing like that has yet been found.

But we do have flint artefacts from the Mesolithic, the period after the last Ice Age when Ireland thawed out and was covered in forest. These were made by people hunting and gathering their food from nature. They are difficult to find in today's landscape. It takes the skilled eye of a keen archaeologist to spot their tiny flint arrowheads in a ploughed field. But these flints

have been found along the East Cork coastline and along the banks of the Blackwater River between Ballyhooly and Castletownroche. Just that alone tells us much - these people were living along the coastline and up the river valleys because this is where the food they were searching for and hunting for is most plentiful - river and sea fish, shellfish, hazelnuts, sea birds and their eggs. From just a few artefacts we can paint a picture of what life was like in a hunter-gatherer campsite overlooking the Blackwater River eight thousand years ago.

And then everything changes when farming comes along - the Neolithic Revolution. The sound of polished stone axe against wood was heard throughout the countryside as forests were cleared to create farmland. Neolithic farmers brought new things to Ireland like domesticated animals and plants, but they also brought a completely new way of life. This is when people began to settle-down in one place and establish local communities. We know this from the remains - just stains in the ground mostly - of their houses found by archaeological excavations in advance of pipelines and road schemes. The artefacts found in association with these houses fill out the picture: animal bones; grains of wheat and barley; sherds of pottery; saddle querns. Each artefact adds to the story of Stone Age farming in Cork.

Cork had two Golden Ages: the Bronze Age and the Early Christian Period. Judging by the number of archaeological artefacts that survive from those periods there was an increase in population, in prosperity and in contacts with the outside world. And of course in both periods there were skilled gold workers making such treasures as lunula and gold discs from the Bronze Age and the tiny but beautiful *Garryduff Bird* in the Early Christian period.

The Bronze Age, as the name suggests, is the age of metal. Cork has an advantage as it is now rich in raw materials as copper ore was discovered and then mined on the West Cork peninsulas. These were busy people with a lot of technical skill as the mines on the eastern slope of Mount Gabriel show. This is also the age of the bronze smith and metalworking had an element of the supernatural, the magical, about it - making one material from another - turning rocks into metal and metal into beautiful and useful objects. This is evident in the careful placing of a bronze axe and two lumps of pure copper into the ground as a form of sacred offering at the entrance to the wedge tomb at Toormore on the Mizen Peninsula. This shows some form of otherworldly connection between a tomb for the dead and the craft of metalworking. The connection with the underworld is also seen in monuments like Drombeg stone circle, Glandore, with its orientation on the mid-winter solstice showing a focus on sun worship. These stone circles were made by farming communities whose very existence depended on the sun and its cycles; good sunshine made good crops; little sunshine meant disaster. The sun deserved worship to keep its influence benign. There must also be an element of sun worship in these fabulous gold-work artefacts - lunulae and sun discs. Their form and design suggest they were part of some ritual display of communication with a deity that shone as brightly as gold.

Again and again in the Bronze Age we find *votive hoards*. Into bogs and lake and rivers the people of the second millennium B.C. are placing or burying or throwing valuable artefacts like axes, swords, spears and objects made of gold. And often it is not just a single item being

deposited but a group of them - a hoard. These have to be some form of offering to the gods. Fortunately, it is a practice that has left us a wealth of Bronze Age artefacts that otherwise would not have survived.

The Bronze Age is also a period of pottery. Important people were buried underground in stone-lined boxes called *cists*, nearly all accompanied by at least one pottery vessel. These are called *food vessels* and that name betrays what they were used for - a last meal for the journey to the underworld. But burial practices change and by the end of the Bronze Age we see a burial where the cremated bones of an individual are placed in a small plain pot placed in a shallow pit - the end of a great tradition of over a thousand years and a sign that change was on the way. That change is signalled by a proliferation of bronze weapons and particularly the sword. Times were troubled when, around 900 B.C., the great hillfort at Clashanimud was burnt to the ground and never rebuilt.

Stuck between these two Golden Ages is the enigma of the Iron Age. This is a Dark Age in Cork in terms of archaeological artefacts and monuments. But there is one artefact from the Iron Age that brightens up the whole period - the magnificent *Cork Horns*. Made by a very skilled craftsman and worn on a shaman's helmet, they bring us tantalisingly close to a lost world of ritual, mysticism and pagan worship.

Things pick up again around the 5th century A.D. with the arrival of literacy and Christianity. The largest display of ogham stones anywhere is in the Stone Corridor in U.C.C. This is language becoming physical in the form of words inscribed on stones. It is the start of Gaelic literature that will eventually, in the 16th century, produce great books like the Book of Lismore, now part of the collection of the Boole Library, U.C.C.

Relics were important to the early Church and the pilgrimages they encouraged, which was also a source of income. That importance and reverence is displayed by the reliquary of Saint Laichtín's Arm. Though it has lost some of its lustre from constant rubbing when revered in 12th century Donoughmore, the achievement of the craftsman who made it is still a wonder to behold; it is on permanent display in the National Museum of Ireland as part of the Treasures of Ireland exhibition. The Arm is the greatest work of art to survive from the early Church in Cork and is a true memento of Cork's second Golden Age.

The Norman presence in County Cork has left few remains, either of monuments or artefacts. It is only when we come into the city and look at the wealth of archaeological artefacts that the city excavations have produced that we get a real sense of what life was like in Norman Cork. This is largely due to the fact that the city is built in a marsh and the wet underground conditions have preserved so much organic material. But wells are waterlogged too and one of these produced a very important and unique find at Caherduggan Castle near Doneraile in North Cork - a leather peytrel from a medieval horse harness. Just a single find but it opens a window into a world of Norman knights riding their decorated horses around North Cork in a show of strength and importance.

The medieval period is also one of continued Christian piety and pilgrimage. The beautiful

revered wooden statue of Saint Gobnait in Baile Bhuirne, though much worn away by centuries of devotion, still has enough presence to attract today's pilgrims asking for her help. It brings the people of Baile Bhuirne directly in contact with their medieval forbearers.

By the later medieval period - the 15th and 16th centuries - the old Norman families have integrated into Gaelic society and a new building boom is underway. Throughout the county parish churches are being built, the same activity at the monastic houses, and everywhere new fortified stone towerhouses are being built. We don't have a great many artefacts to match this building boom but the beautifully carved capitals at Kildorrery Church shows the confidence and skill of these masons.

The archaeological artefacts that were selected for the Early Historic period in this book are a mixed bag telling a lot of different stories. There is a whiff of gunpowder from Kinsale, a taste of the exotic Caribbean from Schull harbour, and a wonderful musical instrument from Ballymaloe. But more than anything else the 17th century was a period of religious tensions and this is reflected in artefacts like the Timoleague Chalice, a display of Catholic piety, and the Tynte effigy, a display of Protestant confidence. In the end both these artefacts tell a poignant story; the chalice survived because it was hidden away during Penal times; the effigy much damaged when the church where it is located was abandoned and ruined in the early 20th century.

In the case of the more recent past, the 18th, 19th and 20th centuries, we have brought attention to the wealth of material that our national and local museums house. Whether it's the mining heritage of Allihies, the military story at Camden Fort, prison life on Spike Island, the wonderful displays at Cork Public Museum and in the National Museum of Ireland, all the museums listed in Chapter 12 have wonderful stories to tell and are well worth a visit. As a taste of what they contain a variety of artefacts were chosen to highlight just a small selection of the riches within.

In conclusion, it is hoped you have enjoyed this dip into the wonderful and varied world of archaeology. At its essence archaeology is about people, people in the past and all the everyday and not so everyday things they got up to. Artefacts are an essential part of that exploration and it is hoped that this selection from County Cork's past has helped tell some of that story in an enjoyable and informative fashion.

Appendix

As per previous publications in the Heritage of County Cork Publication Series, the appendix features a range of additional images – in this instance, artefacts - that collectively tell us that bit more about the past, through items and objects, which have been left behind, passed on or indeed discovered through time.

Included in the pictorial are photos of artefacts that are exhibited in different museums throughout the county and also included is a very nice selection of images that were kindly submitted for this publication from heritage enthusiasts and local heritage groups throughout the county.

The appendix also contains a poem and finally, an index, which shows the range and depth of archaeology delved into in the undertaking of this publication, by focusing on the heritage artefacts of County Cork.

Pictorial of Additional Heritage Artefacts in County Cork

Bullaun stone in Stouke graveyard, near Ballydehob.

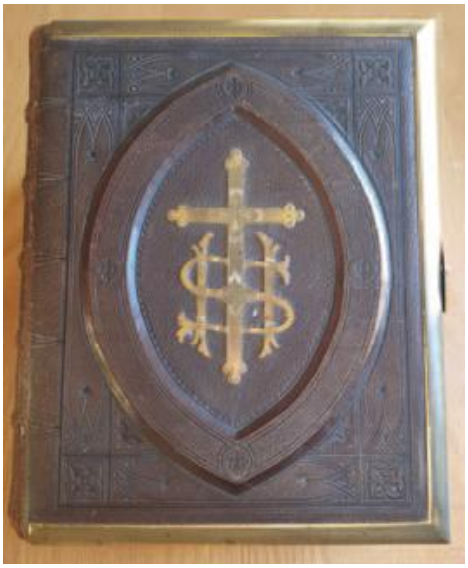
Beltplate of the Kinnalea & Kerricurrihy Cavalry. Image courtesy of Fergal Browne.

Bedstone of cider press, Bandon.

Blacksmith bellows from forge at Powers Cross, Shanballymore.

Page from the 18th century Meade family bible, Ballinhassig.

17th century ship canons, Youghal.



Camden Fort Meagher Bible. Image courtesy of Daniel Maverley.

Clonakilty lace as exhibited in Clonakilty Museum.

Bush Radio. Image courtesy of Donie O Sullivan.

Grinding stone discovered on recent excavation in Clonakilty. Image by Julianna O Donoghue, courtesy of PJ Hayes.

Hand lamp as exhibited in Bantry museum.

Fiddle seed sower. Image courtesy of Donie O Sullivan.

Old glass bottles as exhibited in Clonakilty museum. The one on the left is called a Codd bottle used in the late 19th/early 20th century for carbonated drinks using a marble to seal the top.

Kinsale Copper Farthing 1655 (siege money) found during Main Drainage Scheme. Image courtesy of Dan Noonan.

Old stoneware whiskey jar, which is stamped P & H Egan Tullamore. Located in Shanballymore.

Musket ball (right) and Inkwell (left). Ballyvonare. Image courtesy of Donie O Sullivan.

Runner millstone, Castlemagner. Image courtesy of Donie O Sullivan.

Double leaf wrought iron entrance gates into Marshalstown Church and graveyard.

Blacksmith's mark discovered during the conservation of the entrance gates into Marshallstown Graveyard by Cork County Council. Image courtesy of Pat Ronan.

Linen Hackle as exhibited in the West Cork Regional Museum, Clonakilty. The hackle was used for combing the flax fibers in the making of linen - the production of linen was a major craft industry in West Cork in the 18th/early 19th century.

Original exhibition guide for the opening of Cork Public Museum on April 4th, 1945. Image courtesy of Eoghan Nelligan.

Salmon Gaff, Dunmanway, in Museum of County Life, Mayo. © National Museum of Ireland (1954.42)

Seed sowing basket from Cork, in Museum of County Life, Mayo. © National Museum of Ireland (1943.24)

Sacred Heart Lamp. Image courtesy of Donie O Sullivan.

Selection of medieval & post medieval pots from Cork City excavations as exhibited in Cork Public Museum. Featuring Saintonge & Ham Green Ware top left; Bellarmine front left; Olive jar and amphora top right and North Devon Scraffito ware on right.

This photograph of the interior of a traditional house near Crossbarry shows typical artefacts that were common features in these old houses across the Cork countryside. Courtesy of Owen Twohig.

A selection of mostly, mid-19th century tokens, from around Cork including Cobh (Cove), Skibbereen and Cork City. These were often used in lieu of legal currency. Image courtesy of Lynne Curran-Nelligan.

Spike island chalice and paten used in convict chapel 1848-83.

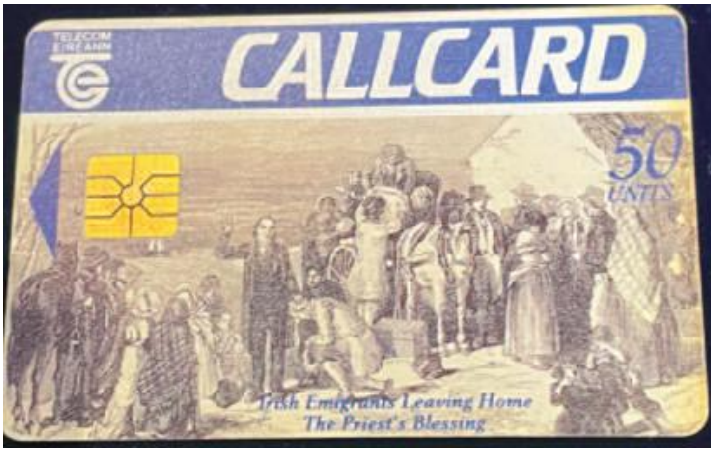
Wine bottle stamped 1770, as exhibted in Kinsale Museum.

The larger anchor, reputedly from the Spanish Armada, found in the 1890s. The smaller anchor belonged to La Trompeuse, which sank in Kinsale Harbour, 1796.

Whipping post, as exhibted in the West Cork Heritage Centre, Bandon.

Stone breaking hammers from Clonakilty Workhouse, as exhibited in the West Cork Regional Museum, Clonakilty. Small broken stone was the main material used in road construction and in much demand in the 19th century.

Youghal lace as exhibited in Youghal Heritage and Visitors Centre. Lace making was introduced into Ireland in the early 19th century mainly by the religious orders as a craft industry to provide an income for the poor. Youghal lace became world renowned for its quality.



A 50 Unit Telecom Éireann Callcard advertising Cobh Heritage Centre - 125,000 copies issued in March 1994 (Image courtesy of Aoife Nelligan). On the reverse it says "Cobh, the Queenstown Story – A dramatic exhibition of the origins, history and legacy of Cobh, a unique Irish port town'. Although part of the recent past for many of us, such an item would be unrecognizable by children today. How then will archaeologists view such an item when they turn up hundreds of years from now?

Poem:

Art, the facts … art. (the facts)

by Conor Nelligan

Art, the facts are clear, we have always been so near
to creating the ideal – if only more could be sincere.
If only more could realise these skies are from our past
and all that's yet to come requires a vision that will last.

Artefacts can tell us how we shaped life in the past,
how are hands did shape our ideas before moulds or social caste.
Artefacts can tell us beings, in this human race,
not to race into the sunset - know each season's warm embrace.

Yet there's a spring in every step, as the summer time approaches,
when we fall for everything, and yet again winter encroaches.
Our days are numbered, scored and lest we forget what is said,
our days now too have minutes, written down but rarely read.

It seems every generation thinks it's better than the last.
In truth we're all the future as we each become the past.
In truth this world has many lies, some need to be this honest -
Artefacts can tell us how things work beneath the bonnet.

For underneath it all, beneath a smooth and shiny surface,
there are parts we cannot see but yet we know they have a purpose.
Just as every atom on this earth is here not without reason,
if we take our past for granted this will be the Age of Treason.

Not treason in the common sense of disregarding State
but treason against who we are and All that makes life great.
If there was nothing 'neath our feet, we'd be falling, the abyss.
Our past is what supports us, there's still time to reminisce.

So how did we get to this from that, which made us who we are,
from being one with Nature to just wanting fancy cars?
Today we are found wanting in not knowing what to lack:
hell bent on moving forward, heaven knows how we'll get back.

Have we ever stopped to think are we happy where we are?
Or better yet, where this road leads, before we go too far?
Studying our past, we learn what who why where and when.
Our past can teach us lessons; when we go wrong, begin again.

True living is a spiral sequence of aligned events;
all key moments in our past with hindsight should make sense.
An understanding of the past equips the present mind
with what it's all been for, suggests there's more yet still to find.

There is much in our museums, perhaps there's more beneath our feet?
Whether by chance or design, every find is just as sweet.
For the more we know about ourselves the more we know the same;
the more we recognise the stakes: life's virtues – not a game.

Some take a chance on life, what is your life telling you?
To be present in the field or just watch on – room with a view?
If nothing was accomplished there'd be little else to see,
that room yet to be built – settle for sagacity.

In a life of deprivation most just want what they need most.
In a place where bread is shared, why do some always want toast?
A toast to all of those that have worked out what really matters –
Life is what we make it, not a crystal ball that shatters.

In the past we burned gold finds just to see what they were worth.
What are values worth today? (still too many sense some hurt)
We are shackled by a past when being alive requires subsistence.
Is this past the reason why this future beckons more resistance?

We're but guests of this existence when nobody has the deeds.
But the quest of our existence? for that we each have keys
to unlock our true potential, document and write our wrongs -
successive generations find their reasons to sing songs.

So requiesce and let us sing, and dream of ages old.
There is many more a story from our past yet to be told.
Round and round we go until we find the right connect;
For most it's hard to find – the spark for what comes next.

On the circuit bored of life, oh how often wires can cross,
and how cross we get sometimes - when we're wired we know no loss.
When we're at a loss for words it is often time to listen
but it's hard to hear home truths when we dream of all that glistens.

All that glistens, truth be told, cannot glisten without light.
Some feel they can do no wrong if there is a legal right.
Why does the term sincerity begin with the word sin?
Well that depends on language 's ní neart go cur le sin.

Mind over matter is a matter for each mind.
We each have what we need for our thoughts to be refined.
For what we dare not say, lines of poetry can convey.
For what we hope there'll be, we can always start today.

If we value this existence, we must show we can create,
in song, in words, in wood, in stone, in everything we make.
All that we have made has worked to make us who we are,
from the first word understood to the first chord on guitar.

No more should we resist what the past is trying to teach us.
There's a life we're missing out on when we're too afraid to live it.
The past remains a puzzle, each artefact a jigsaw piece.
If it's peace that we are after, then we need a great release.

A release from living life based on falsified pretences.
There are now more than a few, who are willing to mend fences.
But what of the lines that have been drawn, before us and behind?
A littoral explanation would crash waves upon the mind.

Is it wrong to cross a line that was made by sleight of hand?
Is a tree not for us all, irrespective of whose land?
We've forgotten to communicate, or how to if you please,
A lost unspoken language in conversation with the trees.

So let's whisper what is true for whispers carry on the wind.
Let us be who we should be, cast away all else, rescind.
What we learn in this life – second nature in the next.
Word of mouth, passed on, can't be deleted in a text.

If we're to know much better, we had better know ourselves,
our capabilities, dust off the knowledge on bookshelves.
And while we each may turn to dust, we leave behind what we create –
Artefacts remind us we can do and mend and make.

What we take from life should at least equal what we give.
In debt, we owe much to our lives, in death may we have lived.
To value this existence and yet know that we depart,
There's a pattern to all Chaos – some may call it art.
(the facts)

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'People have been living in the area we now call County Cork for millennia and in all that time the passing generations left a little of themselves behind for us to discover, appreciate and understand today'.

This publication, supported by the Heritage Council, and part of the Heritage of County Cork Publication Series, takes a look at the historic and prehistoric artefacts of County Cork. From the earliest signs of life to recent times, the reader will learn of the county's fascinating past, as told through its artefacts, and will learn of the many museums that can be visited where this heritage can be enjoyed.

Comhairle Contae Chorcaí
Cork County Council

An Chomhairle Oidhreachta
The Heritage Council

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