

Guide to the excavations at
ARDREIGH, COUNTY KILDARE



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Foreword

We would like to offer a sincere welcome to all readers of this 'Guide to the archaeological excavations at Ardreich, County Kildare'. This book is the culmination of almost fifteen years work (1997-2012) on the archaeological remains discovered during the realignment of the R417 road at Ardreich, between Athy and Carlow. This wonderfully illustrated work presents the findings of the archaeological excavations and the subsequent post-excavation investigations. Written in an accessible format this book aims to present the results of this remarkable excavation to as wide an audience as possible.

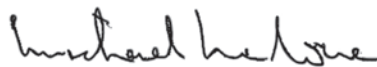
Measuring 750m in length, the R417 realignment was designed to remove a dangerous bend at Ardreich and as this location lay within the "Zone of Archaeological Potential" archaeological investigation was deemed necessary. From the initial archaeological investigations it was apparent that archaeological material was not just confined to the roadtake. After careful consideration it was decided to proceed with the original route and to excavate the archaeology that was present. The funding of the excavation, extensive post excavation work and this publication is testament to Kildare County Councils commitment to protecting and promoting the County's cultural heritage.

This publication represents the work of many dedicated archaeologists. We would like to take this opportunity to thank all those who were involved. In particular, we would like to thank Valerie J. Keeley Ltd, the site director Hilary Opie and Rubicon Heritage Ltd for producing this exciting account of the previously unimagined 9000 years of history in Ardreich.

Kildare County Council is proud to deliver this publication and we sincerely hope you enjoy this informative account of the lives of our ancestors in Ardreich.



Councillor Mark Wall
Mayor of Co. Kildare



Mr. Michael Malone
Kildare Co. Manager



Acknowledgements

A number of people have made important contributions to the excavations at Ardreigh and the post-excavation processes which have cumulated in the production of earlier reports and this booklet.

We would like to thank the excavation teams who carried out the archaeological fieldwork and all the staff at Rubicon Heritage Services who were involved with the post-excavation work. George Willoughby of Kildare County Council and Ed Danaher (Consultant Archaeologist) have been particularly supportive of the project. The authors would like to thank Noel Dunne, NRA for his assistance during the project.

Any images not specifically credited are taken from the Ardreigh Excavation archives or Rubicon Heritage Services Ltd archives.



TESTING

Archaeologists monitor a tracked excavator as it opens test-trenches elsewhere in Co. Kildare.

Testing is often the first invasive stage of an archaeological investigation, after Desk based Assessment has been completed. Similar test trenches were dug at Ardreigh to assess what remains survived beneath the ground.

Introduction

This book is the product of nearly fifteen years of work by a large number of archaeologists. The archaeological excavations at Ardreich were commissioned by Kildare County Council in advance of the realignment of part of the R417 road between Athy and Carlow. A dangerous bend in the road had resulted in a large number of traffic accidents. The council decided that it was necessary to straighten this section of the road for safety reasons. Kildare County Council were also conscious that such a construction project could impact on buried archaeology giving the Local Authority a legal obligation to carry out archaeological works. A plan was put in place to allow archaeologists the opportunity to investigate the site before any work commenced.

A desk-based assessment was undertaken in 1999 which included studying historic maps and documents, records of known archaeological sites and aerial photographs. This suggested that the site had the potential to contain significant buried archaeology and this was confirmed shortly afterwards through the excavation of a series of archaeological trial trenches. The first open excavations took place in 2003. This investigation established that the area had been occupied for thousands of years and highly significant archaeological remains were preserved beneath the modern topsoil.

A second season of archaeological excavation was undertaken between 2007 and 2008. The excavations revealed an amazing and complex archaeological site. Stone tools were recovered which were used by some of Ireland's first settlers around 9000 years ago (7000 BC).



Detailed extract from the Ordnance Survey first edition 6 inch map of 1837, Kildare Sheet 35, showing Ardreich Church location.

People were buried here too - 3100 years ago (1100 BC) the body of a man was cremated near Ardreigh and buried in a ceramic urn, which was discovered on the site. However, it was in the medieval period that the site really flourished. Burial evidence suggests an early church was built there well over 1100 years ago, sometime between the 7th and 9th centuries AD, although no direct evidence of the structure was uncovered. The remains of a medieval town which had its origins over 800 years ago in the 12th century AD were identified. The town of Ardreigh flourished in its early years but was in decline by the 14th century, and had virtually disappeared by the late 16th century AD.

these human remains has provided a wealth of information on this community of people-how they lived, worked and died in medieval Ireland. This book provides an overview of the main findings of the work together with historical information that was gathered through extensive research. It provides a picture of the everyday life of Kildare people in the past.

Generations of medieval people were also buried at Ardreigh. The site produced one of the most significant collections of medieval human skeletons ever found in Ireland- 1,259 individuals were discovered. Analysis of



Archaeological excavations



Extract from the Ordnance Survey first edition 6 inch map of 1837, Kildare Sheet 35, showing Ardreigh Church location.

A high-angle, close-up photograph of a stream flowing through a dense woodland. The water is dark and reflective, mirroring the surrounding green foliage and trees. Sunlight filters through the canopy, creating bright, dappled reflections on the water's surface. The overall mood is serene and natural.

WOODLAND

A stream runs through woodland over clean stones, birds sing in the trees and fish swim lazily in the current, enjoying the sun's warmth on the water. For all our differences, there are still many places we can go and share the experiences of our distant ancestors.

CHAPTER 1

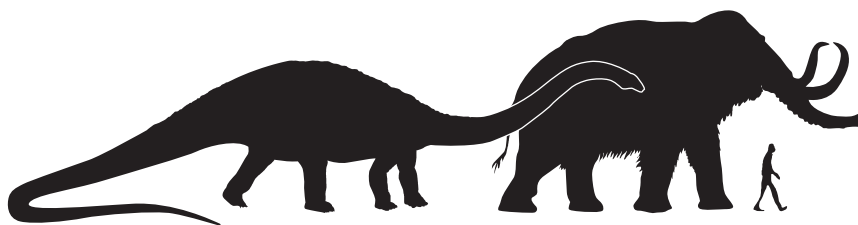
Landscape

Ardreigh is located immediately south of Athy in County Kildare. The site is set on a low rise overlooking the River Barrow which lies to the west. Beneath the soil are layers of sand and gravel up to 30 metres thick, laid down by rivers which flowed through the area when glaciers were melting 12,000 years ago, at the end of Ireland's last Ice Age. Underneath these sands is limestone bedrock, which was formed 350 million years ago in the Carboniferous Period, over 100 million years before the age of the dinosaurs. The Ice Age sands and gravels mean that the area around Ardreigh is well drained and the soils that formed above them provide land of good quality. These soils would have supported woodland vegetation prior to the influence of humans. The woodland in this area is likely to have comprised oak, ash, elm and pine with hazel scrub.

This rich environment attracted some of Ireland's earliest settlers who arrived 9000 years ago and the landscape has been continuously settled ever since. We can see this through the large amount of archaeological monuments around Ardreigh.



Maps showing the location of Ardreigh, Co. Kildare.



350 MILLION BC

250M BC

65M BC

12,000BC

2000AD

CARBONIFEROUS

TRIASSIC

JURASSIC

CRETACEOUS

ICE AGE

HUMANS

(NOT TO SCALE, INDICATIVE ONLY)

QUATERNARY

BC/AD

The earliest evidence for activity in the area is the presence of stone tools found during the recent excavations which were used during a period called the Mesolithic, or 'Middle Stone Age'. These were used by Ireland's first inhabitants, hunter-gatherers who were active between 10,000 and 6000 years ago (8000 - 4000 BC). The River Barrow which lies 200 m to the west of the excavation site would have been the main route used by these people, as travelling by water would have been easier than passing through established woodland. The river would also have provided rich resources such as fish and birdlife for exploitation. Mesolithic hunter-gatherers also used the resources provided by the woodland in these river-valleys. Towards the end of the Mesolithic Period it is thought that people began to clear trees for the first time. This allowed the growth of grass which encouraged grazing by animals, making hunting easier. It was during the Neolithic Period, 6000 to 4400 years ago (4000 - 2400 BC), that substantial clearing of woodland began. This was the time of Ireland's first farmers, who needed cleared areas for their crops and livestock.

The earliest recorded archaeological monuments near Ardreigh date to the Bronze Age between 4200 and 2700 years ago (2200 BC - 700 BC). These consist of a number of circular mounds called barrows, which mark burial sites of important people. A single cremation burial was excavated near the north end of the archaeological site at Ardreigh. During excavation a sample of the soil surrounding this burial was taken. It was processed and analyzed and small fragments of wood charcoal were found within it. These fragments provide us with information about the woodland that was present in the landscape at the time this person died. It also

tells us what types of wood were used to cremate the body, as the charcoal formed part of their funeral pyre. The most dominant tree was found to be oak with smaller amounts of hazel, an apple type tree (this could be hawthorn, apple or pear) and a small amount of alder. The fact that most of the charcoal



Oak, Ash and Hazel leaves

fragments were oak may mean that the people in Bronze Age Ardreigh preferred to use it for burning, and it could also indicate that there was plentiful oak in the surrounding woods. Oak, hazel and apple type species are associated with dry woodland while alder normally grows in marginal or wet woodland. The wet woodland may have been found beside the River Barrow. Throughout the Bronze Age and Iron Age it is likely that areas of this woodland were cleared to provide land that could be used for grazing and growing crops. The River Barrow was shallow enough at Ardreigh to be crossed, or forded, and this meant that it became a strategic location on the river, which was the motorway of its day.



The River Barrow as it meanders through the countryside of Kildare.

By far the greatest amount of archaeology around Ardreigh dates to the medieval period. Sometime between the 7th and 9th centuries AD a church enclosure was established at Ardreigh. In the period before towns developed in Ireland, this religious site is likely to have functioned as a focus for settlement. The landscape around the enclosure was one of farmland dotted with isolated settlements such as ringforts. Indeed three ringforts can still be seen in the fields surrounding Ardreigh. These are large circular enclosures which would once have contained the farm houses of wealthy landowners in the area. The Anglo-Normans arrived in Ireland in 1169AD, a little over 800 years ago, and their presence had a huge impact on Ardreigh and County Kildare as a whole. Ardreigh began to develop into a village sometime before 1200AD, and was established by either Thomas le Fleming or his successor Milo de Stanton. An early castle known as a motte and bailey would have originally formed part of the larger

medieval landscape of Ardreigh, although no trace of one survives today. A motte is a flat topped earthen mound which would have had a timber castle built on it, with the bailey being an enclosed area connected to it. These were constructed by the Anglo-Normans in strategic locations so they could control the surrounding countryside. Another type of early fortification, known as a moated site, is also located nearby in the townland of Barrowhouse. This moated site is likely to be slightly later in date than the motte. It has a rectangular moat or ditch with an internal bank enclosing an area of over 50 metres in both directions. Within this protected space buildings would once have stood, which served as the lodgings for a local wealthy landowner 700 years ago.

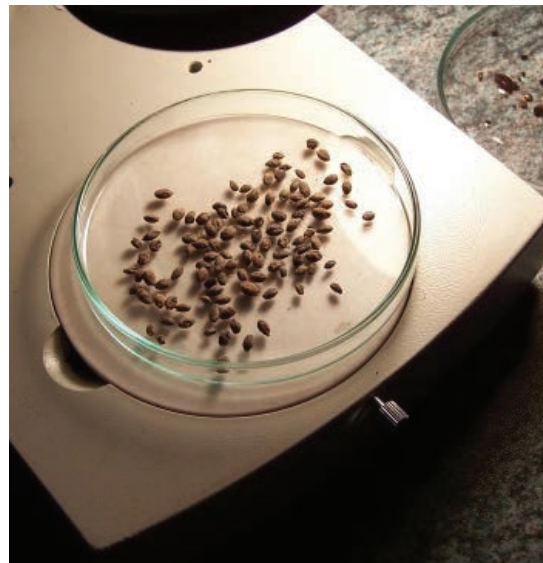
The archaeologists discovered much evidence about the layout and function of the church enclosure and later town of Ardreigh. During the dig 671 soil samples like the one around the Bronze Age cremation were taken, many



A view of the new road passing the site of Ardreigh Churchyard.

of which dated to the medieval period. The charcoal found in the medieval samples tells us that areas of dry woodland were still present in the locality at the time of the church and town. We know that oak, hazel, ash, blackthorn and small numbers of apple type trees could be found in the area. Only a small number of these species like to grow in shade, which tells us that the woodland was either fairly open or existed as smaller clumps rather than covering the whole area. Occasionally the people of medieval Ardreigh dropped material such as plant remains into the fires they were using, preserving them and thus providing us with information about their lives centuries later. Charred hazel shell was found in the medieval samples, so we know the locals used the woodland to collect nuts to eat. Many other charred plant remains were also found.

The most common was the grain from their



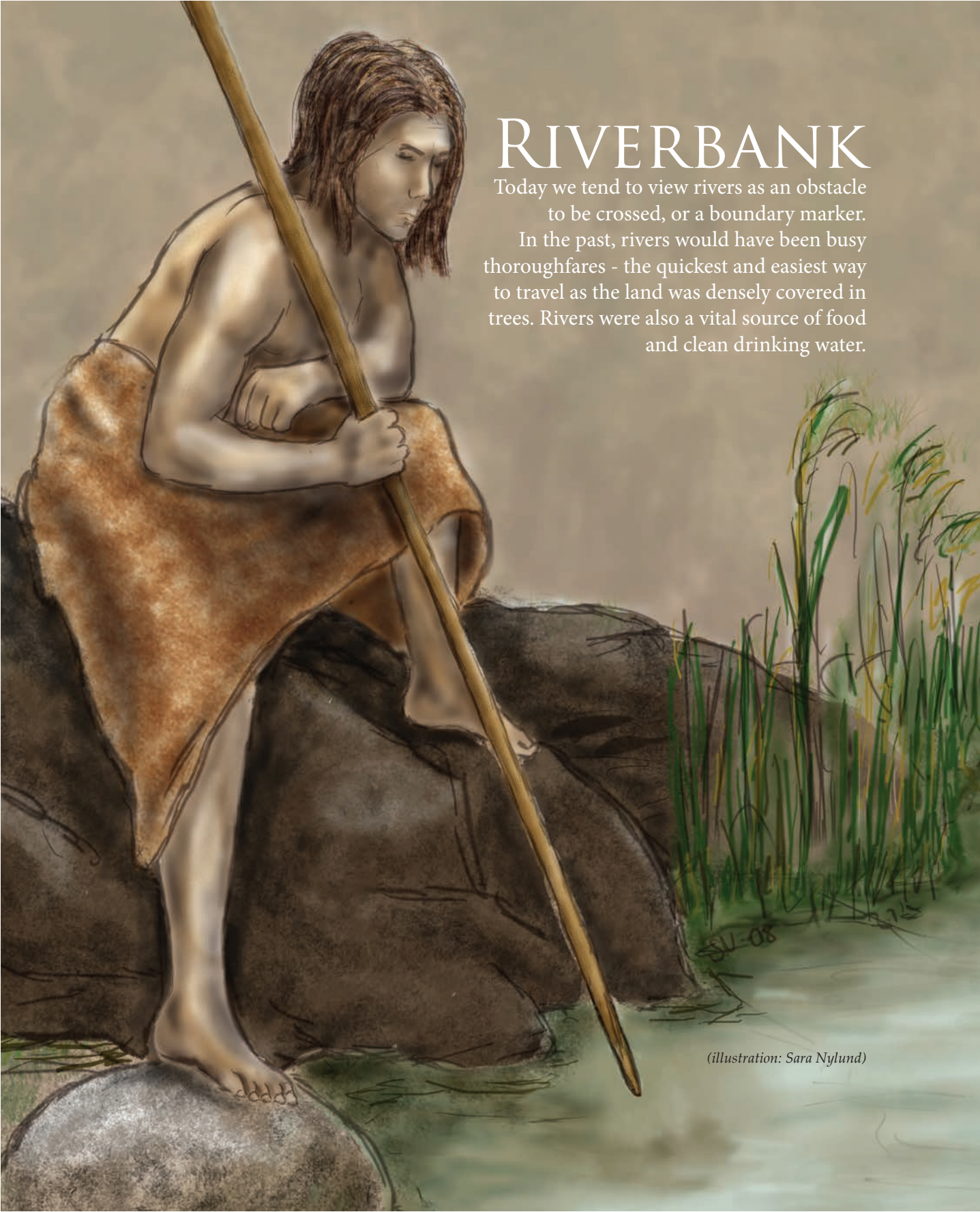
Charred cereal grains being analysed under a microscope.



fields, which was found in over 250 of the samples from the excavations. This reveals the types of crops that were growing in proximity to the settlement and later town at Ardreich. A mixture of wheat, hulled barley, oats and peas were the most common varieties. This diversity suggests that the medieval farmers of Ardreich were using crop-rotation, where they planted different crops in different years to keep the soil productive. We also know that wild plants such as goosefoot, scentless mayweed, bistort and sedges were present in the landscape. Some of these may also have been gathered as a food source or for medicinal use. Aside from the remains of the plants used in medieval Ardreich, it is also possible that some of the land divisions and boundaries we see in the landscape today are the remains of the work of these medieval farmers.

Today, when we look at Ardreich there is

very little left to suggest that there was once a thriving settlement here. This could not be more different to nearby Athy, which also flourished in the medieval period but remains an important town to this day. Athy and Ardreich competed with each other for trade and influence during the middle ages; Athy would eventually win this economic battle, becoming one of the reasons that the settlement at Ardreich ultimately failed. Ardreich may already have been weakened before it was finally abandoned, affected by plagues such as the Black Death and by sporadic warfare in the area. Following the decline of the town of Ardreich the land where the buildings used to stand returned to farmland. These remains lay beneath the fields for hundreds of years before being rediscovered and excavated by archaeologists.



RIVERBANK

Today we tend to view rivers as an obstacle to be crossed, or a boundary marker.

In the past, rivers would have been busy thoroughfares - the quickest and easiest way to travel as the land was densely covered in trees. Rivers were also a vital source of food and clean drinking water.

(illustration: Sara Nylund)

CHAPTER 2

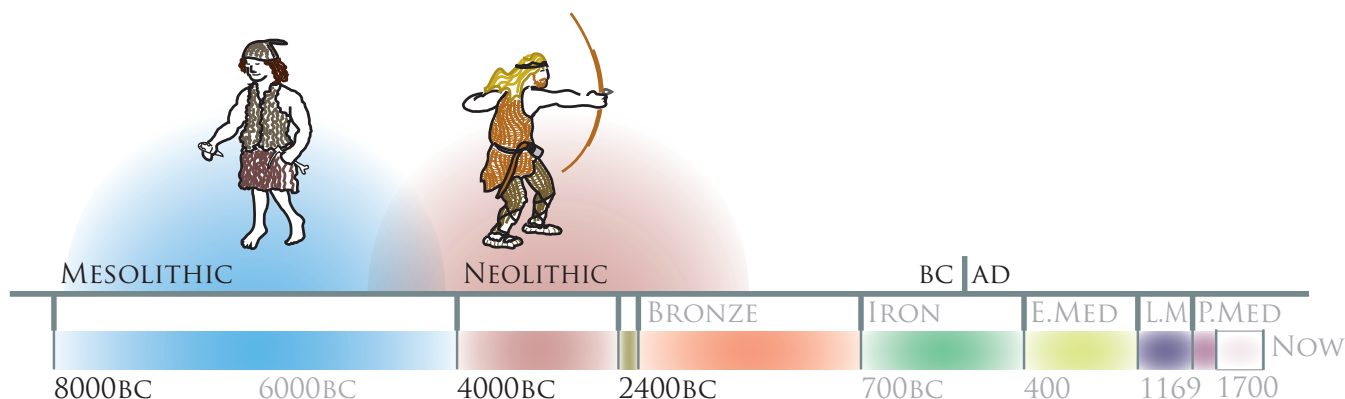
Ardreigh's First Settlers

During the excavations a number of stone tools were recovered which were lost or discarded by people during the Mesolithic (8000- 4000 BC), the period when Ireland's first settlers arrived. These people lived a nomadic lifestyle, hunting animals, foraging for plants and fishing both rivers and coastal waters. The stone tools recovered mainly dated to the Early Mesolithic (8000-6700 BC) with one polished stone axe dating to the Later Mesolithic (6700 – 4000 BC). A recent survey of the Barrow River Valley (Kador, 2007) has found traces of these earliest inhabitants all along the valley. This suggests that the valley was an important focus for Ireland's Mesolithic people. The river provided access through the heavily wooded landscape while food was plentiful in the riverine environment.

Early Mesolithic tools included flakes and blades which were made from stone such

as flint; these would have served the same function as modern day knives and would have been used for working wood and leather and for butchering animals. The presence of these tools indicates that people were living nearby, probably in temporary shelters and exploiting the rich ecosystem that is the Barrow River Valley. From excavations elsewhere in Ireland we know that the Mesolithic diet was rich in fish and wild pig, both of which would have been plentiful in the Ardreigh area. Birds such as wood-pigeon, woodcock, grouse and duck were also hunted. These early people had a great understanding of their environment, and collected a wide variety of plant foods including apples, pears, hazelnuts and water-lily seeds which were processed into something similar to popcorn!

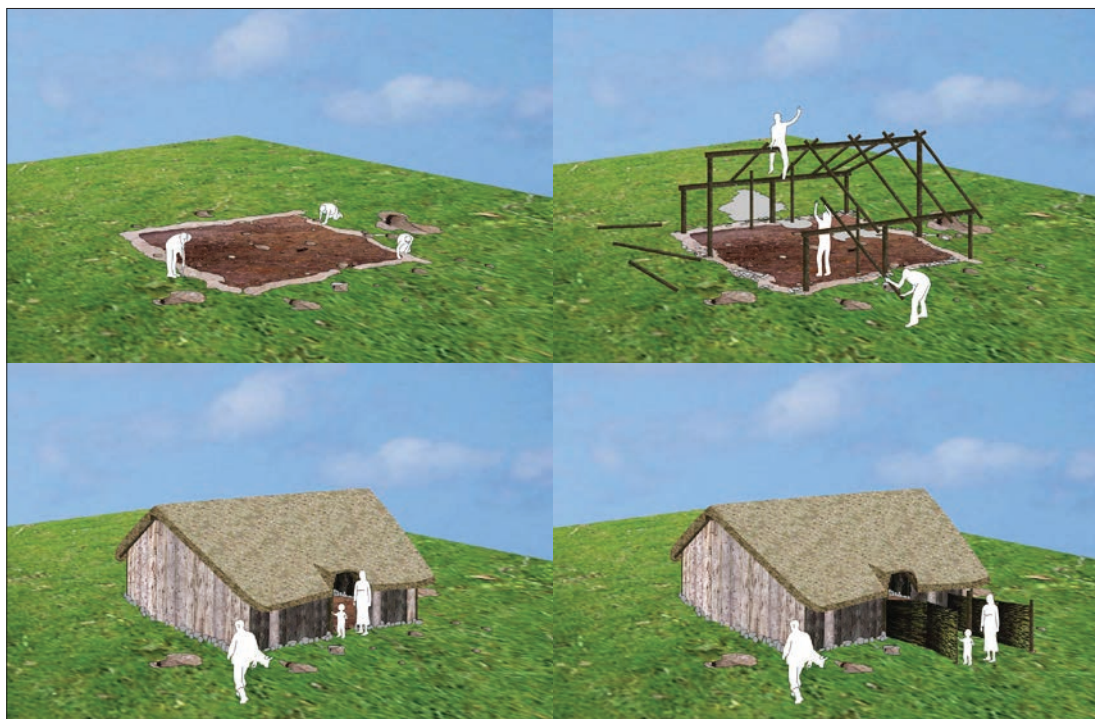
Polished stone axes are a very common find in Irish early prehistoric sites, the one found at Ardreigh dates to the later Mesolithic. These tools were used to clear areas of



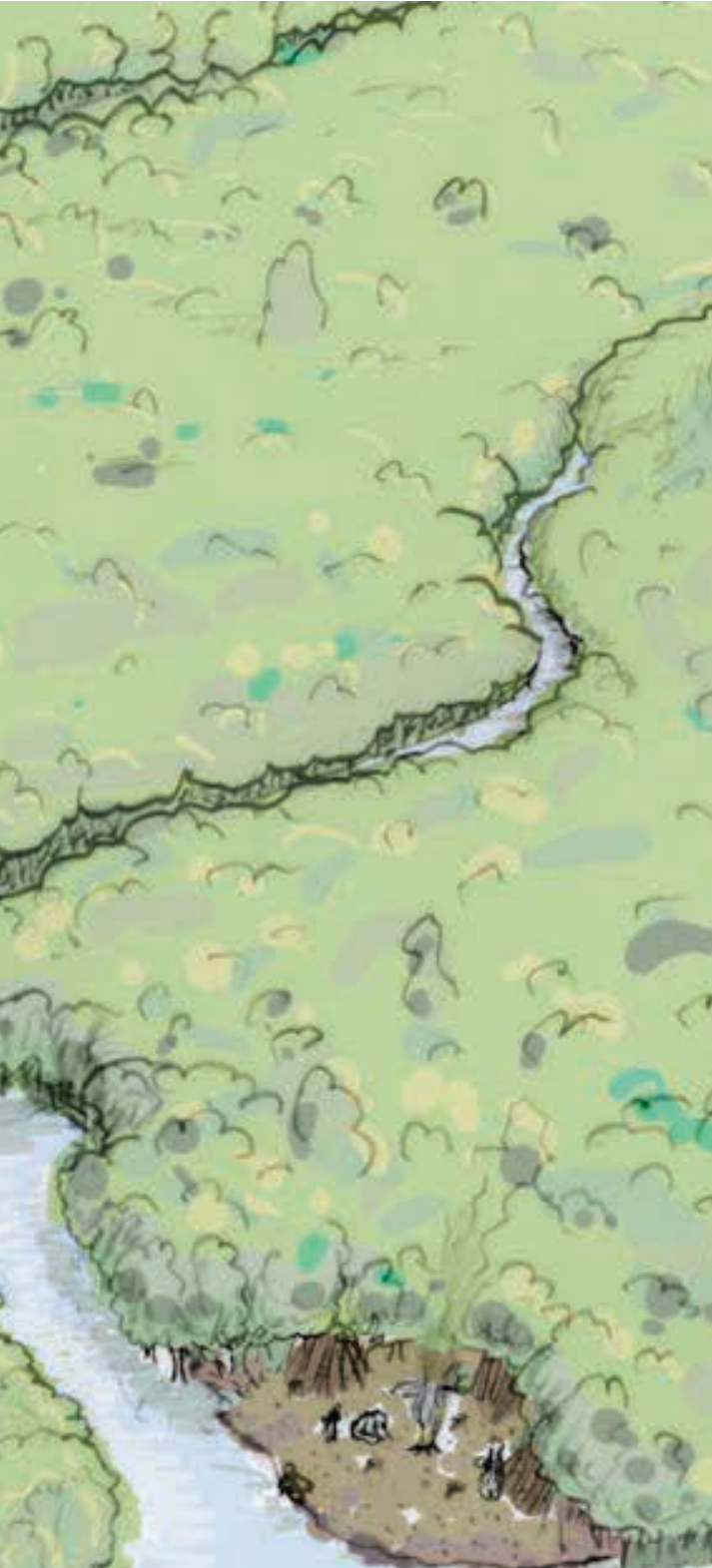
woodland in order to encourage grasses to grow which in turn attracted grazing animals that could then be hunted. This activity created the perfect environment for people to begin farming. Other flint tools found at the site have been dated to the Neolithic, the period that brought about the introduction of farming to Ireland. Some of the houses of these first farmers have been found near the site along the route of the M9. These early Neolithic houses were incredibly well built and looked similar to the log-cabins used by settlers in America in the 18th century. These 'log-cabins' would have been the homes of extended families who would have grown crops and kept small herds of animals. The first pottery was made at this time and there is evidence that ideas and goods may have been traded as far as Britain.



Polished stone axe from Ardreich. This is a very large example and may have been ceremonial rather than practical.



Sequential reconstruction imagining the process of building a Neolithic House. (illustration: Jonathan Millar)



Changing climate and increasing population numbers influenced the transition from nomadic Mesolithic hunter-gatherer groups into settled Neolithic farmers between 8000 and 2000 BC. The onset of the Neolithic was marked by an influx of new peoples into the country who brought with them new burial rites (megalithic tombs), new house-types, pottery, cultivated crops and domesticated animals. Areas of woodland were cleared to make way for crops and rising water-levels altered the distribution and density of native woodland in riverine environments. (illustration: Jonathan Millar)



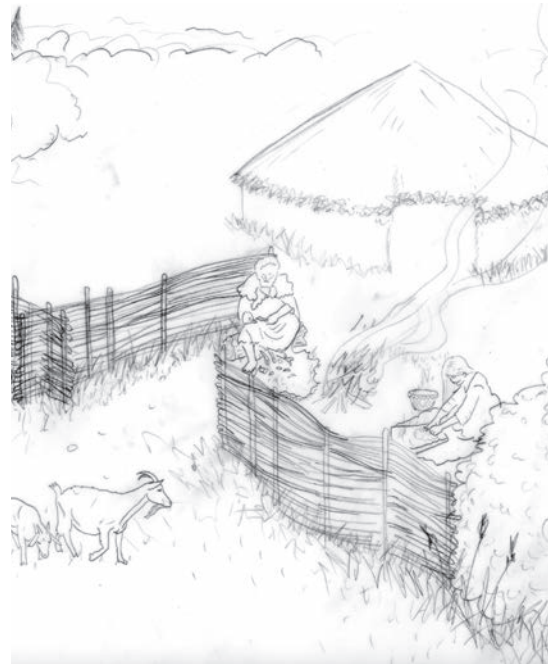
BURIAL

The emotional importance of mourning and remembering lost loved ones is as old as humankind. The ways in which we have dealt with our dead have changed over time, but the motives remain the same - paying due respects, observing ceremony and ritual and waving an individual off safely, whilst feasting and celebrating their life. A funerary urn similar to this was found at Ardreich - this urn was excavated at Moone, Co. Kildare.

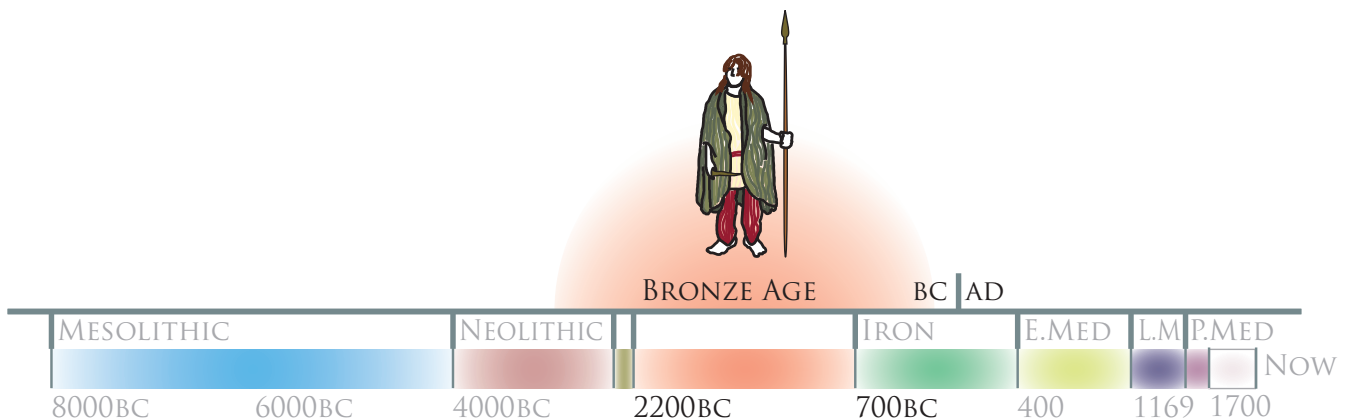
CHAPTER 3

Ritual in the Bronze Age

Towards the end of the Bronze Age, a man aged between 35 and 45 was buried at the Ardreich site. The circumstances that led to his death are unknown but we have recovered a considerable amount of information about his funeral. First, a pyre was built, probably an elevated platform constructed of wood. The man's body was laid on the pyre and the whole structure was set ablaze. We know that this was not the most efficient of cremations as analysis of the burnt bone indicates that it barely exceeded 800°C and the body would not have been efficiently burnt. The remains of the body were gathered together and placed in a bucket shaped ceramic vessel. This pot had previously been used domestically as there was soot from cooking fires on the inside and outside of the pot. Once the man's remains were placed inside the pot, it was buried. Great care was taken with the burial indicating that the dead man was held in high regard by his community who afforded him great respect by this funeral process.



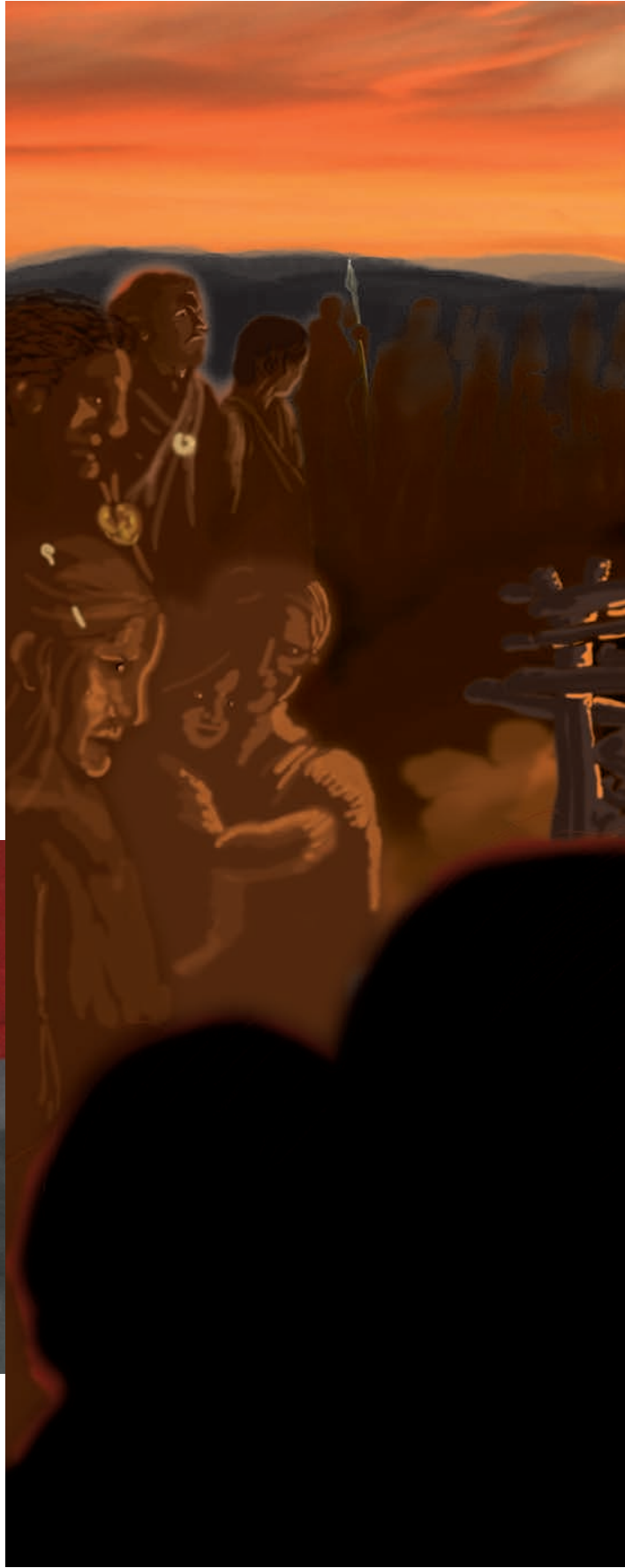
Reconstruction of a Bronze Age house and craft-workshop area. (illustration: Jonathan Millar)



Significant evidence has been recovered in recent years about life in the Bronze Age. We know for instance, that people were generally very healthy and of a similar height to modern day people. Bronze Age people lived in circular timber houses with thatched roofs. Settlements were usually quite small with two or three houses built together and forming the centre of a farm. These would have served as the home of an extended family which would have farmed the surrounding land, trading excess produce with their neighbours for goods that were not available from the surrounding lands. It is likely that these people belonged to tribes with local chieftains. One of the most common archaeological sites dating to this time is the fulacht fiadh or burnt mound. These sites are traditionally interpreted as ancient cooking places but recent research indicates that they were used for various activities which required heated water such as tanning leather, prehistoric saunas and maybe even brewing beer!

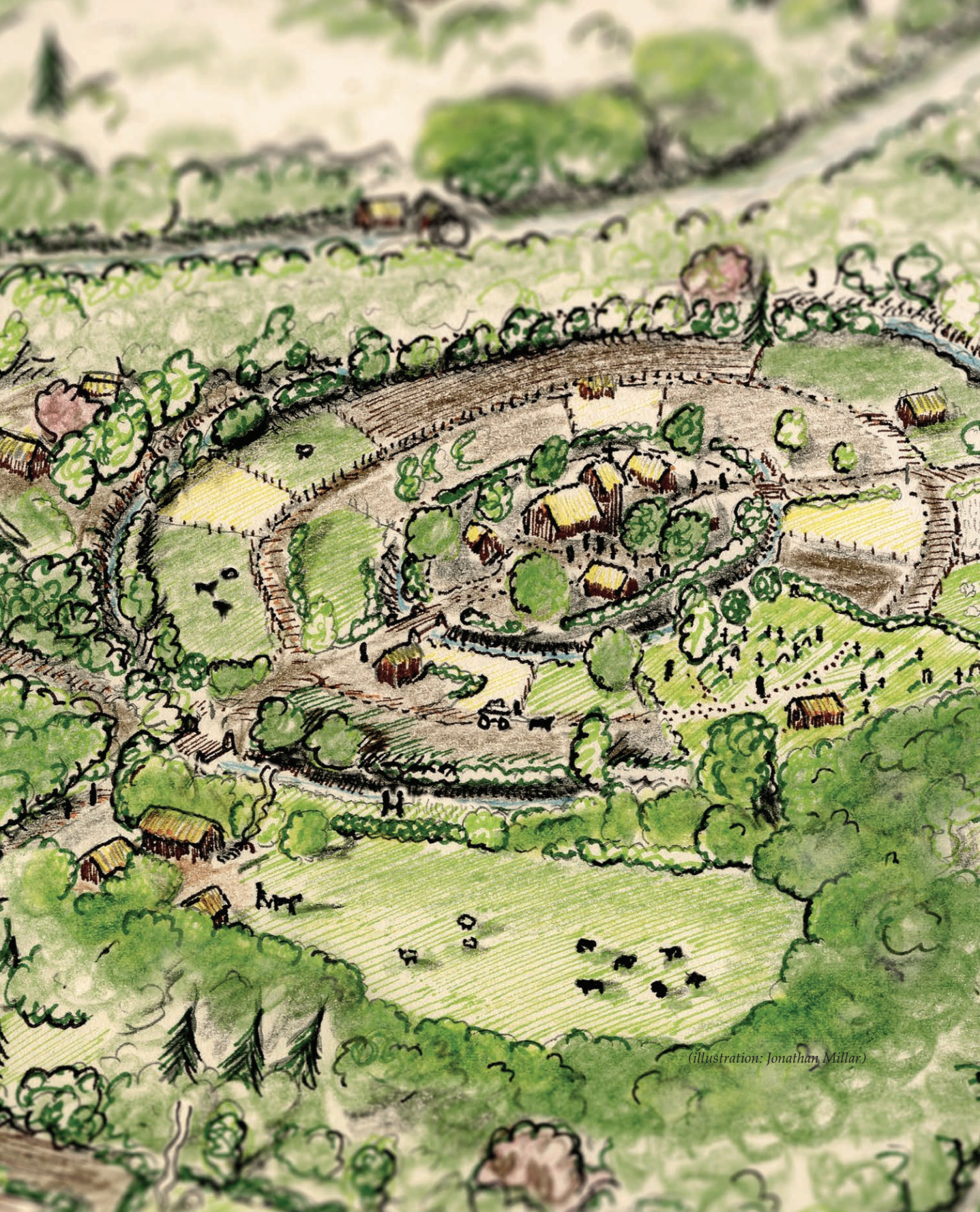


Bronze Age cremation urn from Ardreich.





Artistic interpretation of a Bronze Age funeral pyre and ceremony. Oak would likely have formed the principal fuel for pyres, as it burns hottest and longest of native wood. Pollen recovered from the remains of excavated pyres has also shown that ash, crab-apple, hazel and yew were also burned - it is possible these were specifically chosen for symbolic or aesthetic reasons - their wood burns with a more distinctive scent. (illustration: Jonathan Millar)



(illustration: Jonathan Millar)

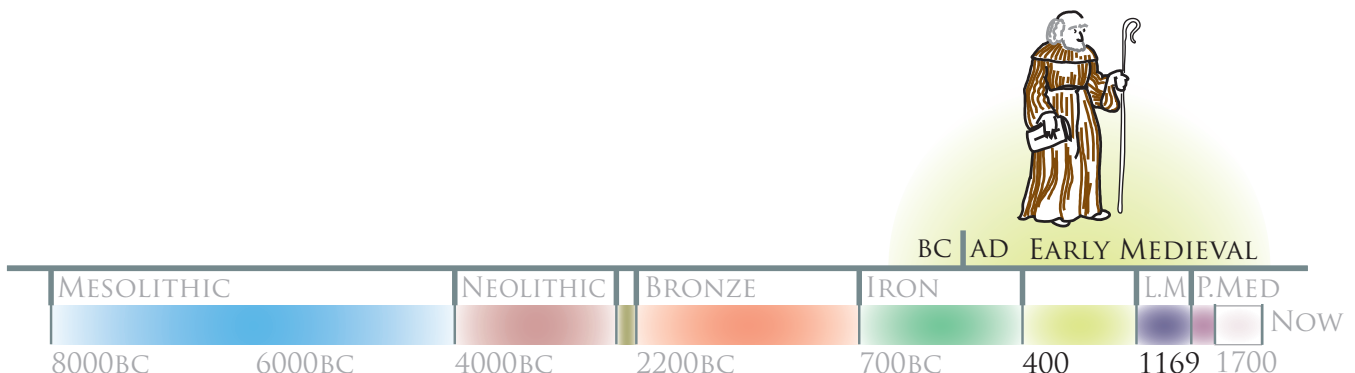
CHAPTER 4

Aldreigh's first church

A church may have existed in Aldreigh from as early as the 6th century. A ditch that surrounds the current church site was radiocarbon dated to this time, which is known as the early Christian or early medieval period. The ditch formed a circular inner enclosure which was at the centre of a much larger outer enclosure. It is likely that a timber church, possibly with a thatch roof was located in the inner enclosure, with some small shelters for monks surrounding it and an associated cemetery. The church would have served the religious needs of the local population and the community of monks may have provided a focus for trade, resulting in more people settling there. In this way Aldreigh started to grow in size and eventually take on the appearance of a village surrounding the church and cemetery. Adding to what was becoming a vibrant community the ringforts in the surrounding area would also have been occupied at this time.



Cemetery enclosure ditch at Aldreigh, during excavations.



Everyday activities in the settlement of Ardreich
During the excavations evidence was found for some of the activities that were being undertaken by the early inhabitants of Ardreich in the outer enclosure. This included a number of kilns, used to dry grain. These kilns tell us that crops were being cultivated in the surrounding fields and that cereal was being processed to make flour. A large number of quern stones were recovered which were used to grind the grain into flour. The remains of a number of temporary structures were identified which are believed to be workshops or storage sheds. As well as this, the medieval inhabitants had



Archaeologists excavating a skeleton at Cloghristick, Co. Carlow - plastic and wooden tools are used, to prevent damage to the bones during the removal of surrounding soil.



An assemblage of animal bone

dug rubbish pits within the outer enclosure. They had buried animal bone in these pits; most were from cattle, but there was also goat, pig, horse, dog and cat present. This assemblage represents domestic waste and shows what types of animals were kept by the people of the town. It is likely that cows were used for milk as well as being slaughtered for meat and other resources such as bone to work and hides for leather. Similarly, sheep would have provided wool for textiles and meat. Marks left on the bones provide evidence that as well as being kept and slaughtered here animals were skinned and butchered in this area, while the bone was also worked on site to produce items such as needles, pins, weaving tools, dice etc.



Example of a badly broken and healed femur. The bone has not been re-set at all following the injury - the person suffering from this would have been severely crippled.



Osteoarchaeologist Carmelita Troy analyses the human remains from Ardreigh to determine the age and sex of the individuals. Skeletons can also provide evidence of the general health, cause of death and congenital defects of the individual and some diseases, such as leprosy and polio can also leave permanent marks on the bones.

The cemetery

During the 7th or 8th century the Ardreigh population continued to grow and the small cemetery in the inner enclosure was no longer big enough to service the settlement. The earliest burials excavated in this area have been dated using radiocarbon dating

to the late 7th or early 8th century. Burial here appears to have commenced in a haphazard way but quickly became organized, with ditches being excavated to mark the limits of the new cemetery. All members of society were included in the cemetery population. The cemetery continued in use throughout

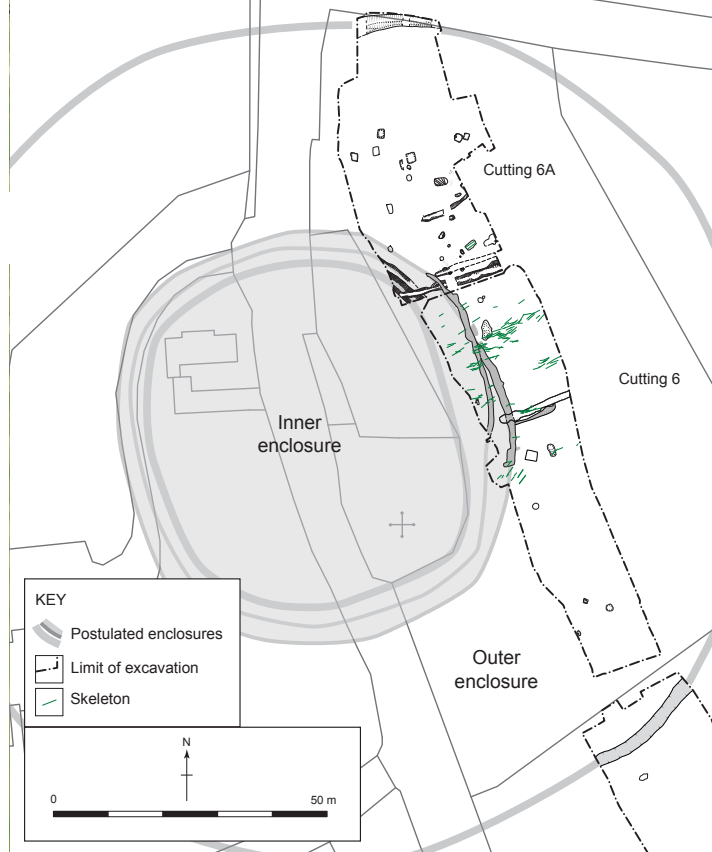


An ossified (fused with unhealthy bone growth) spine from the Ardreigh assemblage. Much can be learned about the standard of life, quality of nutrition and characteristics of employment of individuals from their skeletal remains.

the early medieval period which tells us that the settlement was permanent and successful. The burials in the cemetery were very simple and carried out in accordance with Christian rites. They were lying on their back in a roughly west/east alignment with their head at the west. Most appeared to have been placed into their grave in a shroud rather than having a wooden coffin. A total of 155 burials took place during the early medieval period.

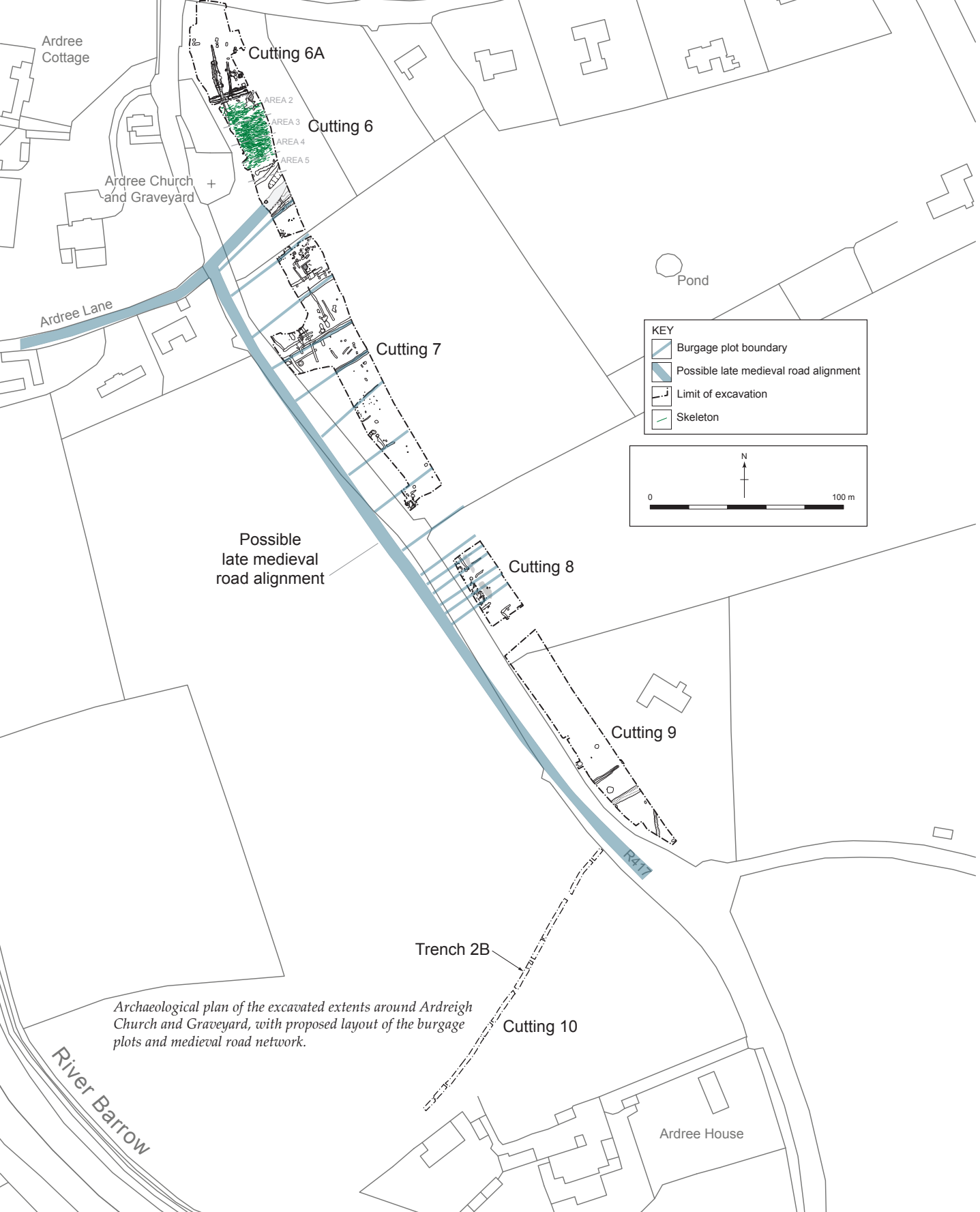
During this period the site at Ardreich was located in the kingdom of Laigin (or Leinster) between the territories of different families or tribes. These were the Uí Muiredaig to the east of the River Barrow and the territories of Uí Buide and Uí Crimthain Áin to the west. It was quite common for early monastic or church sites to be placed on the boundaries between territories such as these.

Excavation plan showing the possible arrangement of ditch enclosures surrounding the early church - these may represent different phases of activity on the site and may have developed over time. The existence of the outer enclosure on the scale illustrated is conjectural, but is based on excavated evidence.





*Interpretative reconstruction illustration of how the early ecclesiastical enclosures at Ardreich may have looked.
(illustration: Jonathan Millar)*



Archaeological plan of the excavated extents around Ardree Church and Graveyard, with proposed layout of the burgage plots and medieval road network.

CHAPTER 5

The town of Ardreigh

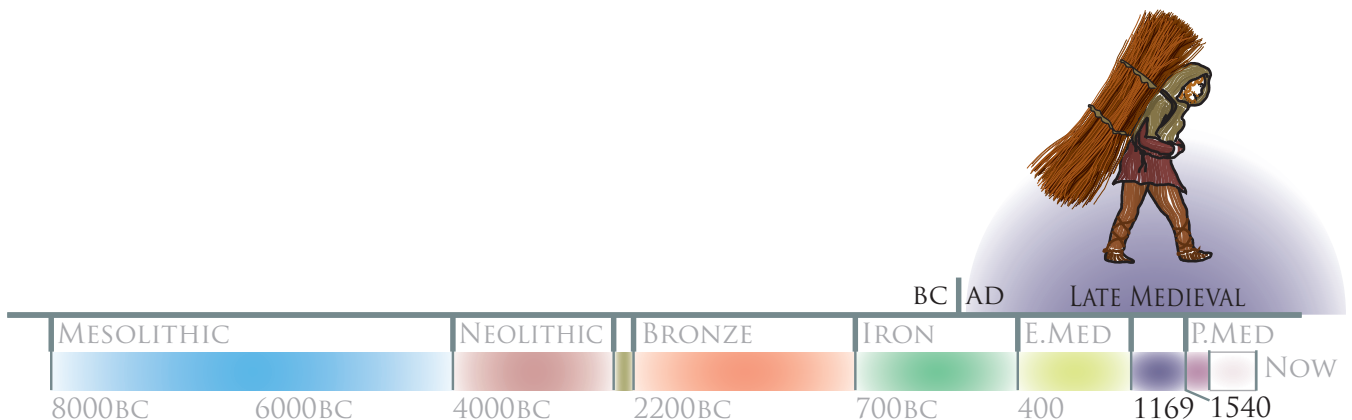
During the 12th century Ireland's first planned towns were built on a model introduced by the Anglo-Normans. These towns, known as boroughs, were established to act as a focal point in the landscape where the Anglo-Normans had control over activities such as trade and the administration of justice. Often they were established where a previous settlement had been located for strategic reasons, as is likely to be the case at Ardreigh. Once a borough was established the land within it was allocated to people known as burgesses. The burgesses were free men who were allowed certain privileges such as trading rights. These privileges could allow the burgesses to become wealthy local businessmen. Also living within the borough were local craftsmen who would carry out crafts such as blacksmithing, carpentry, stone masonry and textile and glass making.

At Ardreigh the space to the south of the early medieval church was divided into properties known as burgage plots which

consisted of long narrow strips of land set either side of a road. These burgage plots or



Excavation in progress at Ardreigh.



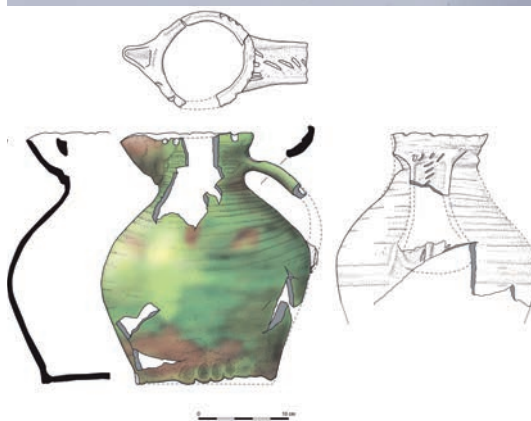
properties were defined by long, shallow ditches which formed their boundaries. At the front of each of the properties a timber building was constructed of upright timber posts with wattle and daub or turf walls and a thatched roof. Evidence was recovered in the excavations for internal walls which were formed by wattle hurdles. A candlestick recovered during the excavation indicated that these houses had internal lighting. These buildings would have been the home of Ardreich's burgesses. Many artefacts were recovered during the excavations which inform us of the kinds of professions people had, the goods that were made locally and also the places that people traded with- both within Ireland and further afield.

Crafts

Textile production is one of the crafts known to have taken place in the borough of Ardreich. Spindle whorls which were used to spin fleece into wool and a number of stone loom weights were recovered during excavations along with weaving tools made of bone. Several bone needles, pins and toggles and three metal thimbles indicate the cloth was also likely to have also been made into clothes or other items within the town. Many of the weaving and sewing tools were made of bone and these were also likely to have also been made in Ardreich.

Trade

While many everyday items used within the town were made locally, trade also brought in more exotic items. The right to hold weekly markets and annual fairs within the borough allowed opportunities for trade. Pottery is one item which is not likely to have been manufactured within the town and much of the assemblage recovered from Ardreich was made in Dublin, although some pottery



A medieval Ham Green Jug (illustration: Sara Nylund.)

A decorated silver ring brooch



Fragments of a decorated bone comb



Bone die (half of a 'pair of dice') and a bone tuning peg

came from as far as the Saintonge region of southwest France. Pottery recovered from archaeological sites is usually in the form of small fragments or sherds from broken and discarded vessels. These are analysed by a pottery specialist who identifies them and provides information about what type of vessels are present and how many complete vessels there would have been. At Ardreigh there were a large amount of jugs with other vessels including storage jars, cooking jars and bowls.

Fashion

Numerous dress accessories such as ringed pins, stick pins and buckles along with jewellery such as the silver ring brooch recovered from the excavations give some indication of dress styles and fashion in Ardreigh. Ring and stick pins were used to hold together items of cloth and were often highly decorated. Personal hygiene and concern for appearance is also indicated by six bone comb fragments which were recovered during the archaeological excavations. These include one beautifully crafted example which was double-sided and had a central plate with elaborate decoration.

Leisure time

Some of the leisure activities indulged in by the population of the town are suggested by finds recovered during the archaeological excavations. A bone tuning peg fragment is of a type used to tune instruments such as harps, fiddles or lutes. It is likely that board games were played as a gaming piece and die were found. The gaming piece was made of bone and was to be used on a perforated board. The bone die was a very fine example with the numbers on the faces indicated by carefully cut concentric circles.

Right: A pair of skeletons buried at Ardreich. The seemingly haphazard arrangement of graves in the cemetery suggests 'plots' may not have existed in the sense we would expect today, the graves may not all have been marked clearly either.

Death and burial

The cemetery which had been established in the early medieval period continued to service the needs of the population of Ardreich and the surrounding area in the late medieval period (and also into the post-medieval to modern period). Indeed, as the population of the town grew, so the cemetery expanded. The area of the cemetery continued beyond the limits of the archaeological excavations and so more burials remain beneath the soil in the area around the new road. The 1,060 excavated skeletons from the late medieval period were buried in the Christian tradition and were likely to have been buried wrapped in a shroud rather than a coffin. Specialist study of the skeletons by an osteoarchaeologist allows us to learn about the health, diet and lifestyle of the population. Women, men and children were all buried in the cemetery. Residues called calculus found on the teeth of the skeletons show the medieval population did not brush their teeth as we do today. It also provides an indication of the diet which must have been high in grain based foods such as bread and porridge. While the general health of most of the population was good there is evidence for joint diseases such as osteoarthritis in the older people. Infectious diseases such as tuberculosis were also identified and there was even one person who had leprosy. Some of the skeletal remains showed evidence of surgery such as amputation of a leg. There was also a case of trepanation where a specialist tool is used to cut a hole in the skull to relieve pressure build up in the brain.



An example of Trepanation (skull drilling) on a sub-adult skull from Ardreich. The bone around the wound has healed, showing the individual survived the procedure.

Pilgrimage

The perforated scallop shell found in the neck/ shoulder area of a male burial in the cemetery was a very interesting find which indicates he was likely to have been a medieval pilgrim. Such shells were used as a badge of pilgrimage as early as the 12th century by pilgrims who had travelled to the shrine of St. James in Santiago de Compostela, northwest Spain. The shells were sold in booths near the shrine and the sale of such items elsewhere was prohibited by the church. These badges of pilgrimage allowed the wearer to gain alms, hospitality and general protection and also exemption from tolls.



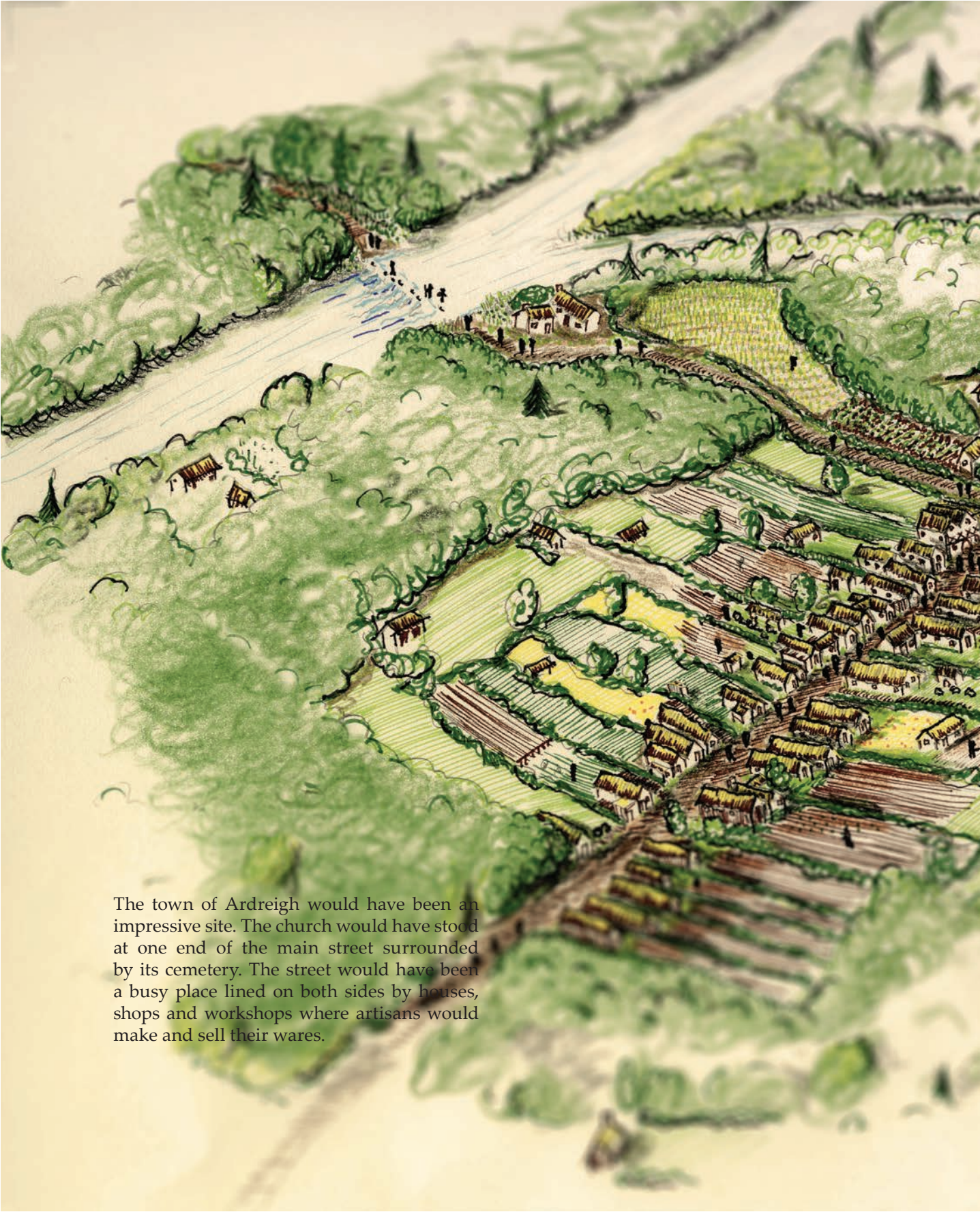
Pilgrimage scallop-shell pendant, excavated at Ardreich



Reconstruction of a cereal drying kiln. Example of these were excavated at Ardreich (inset to right), along with a lime kiln. These kilns would have formed an essential part of the early agricultural 'tool-kit' in the medieval period (and later) and are very commonly found on archaeological sites across the country.

Illustration: Jonathan Millar





The town of Ardreich would have been an impressive site. The church would have stood at one end of the main street surrounded by its cemetery. The street would have been a busy place lined on both sides by houses, shops and workshops where artisans would make and sell their wares.



*Interpretative reconstruction illustration of how the late-medieval town of Ardreich may have looked.
Illustration: Jonathan Millar*



CRAFT

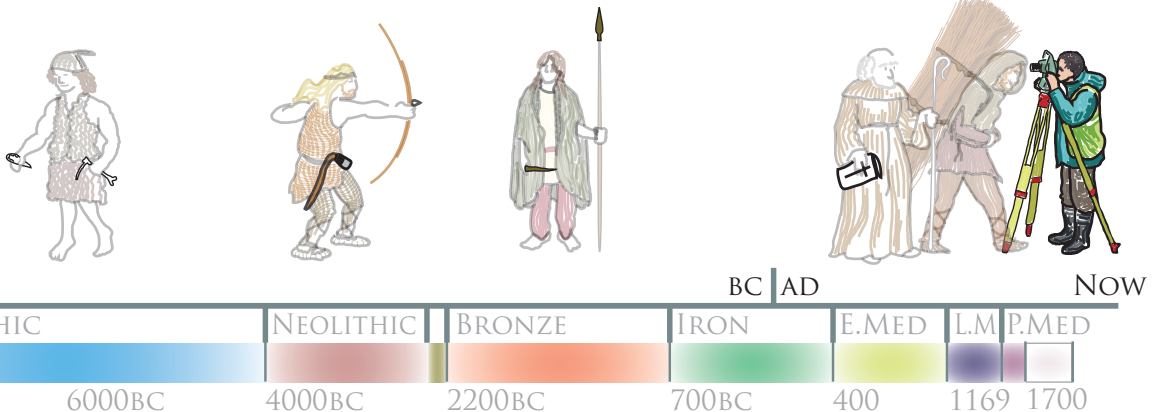
Medieval craftsmen were skilled and creative - this little bone-carved figure from Ardreich is less than five centimeters long and was probably part of a decorated pin.

CHAPTER 6

Conclusions

The work by Kildare County Council to improve a road for today's population has allowed us to get a unique view into the lives of their ancestors. Through the discoveries made we have been able to chart the history of Ardreigh, from the moment when the first hunter-gatherer's inhabited Kildare following the last Ice Age. The story of Ardreigh is the story of human development; here we can see through the centuries the developing of farming in Ireland during the Neolithic, and the burial practices that were in use during the Bronze Age. The early Church came to Ardreigh, changing the landscape of the locality for hundreds of years. They turned what had been a convenient fording point of the river Barrow into a focus of not only religion but also manufacture and trade. This created what was in effect an early town at the site. It was the centre created by the Church that attracted the Anglo-Norman's to Ardreigh. Following their invasion which commenced in 1169, the colonists spread into Kildare and sought to control this fertile

area. They first ensured that they controlled important locations like Ardreigh by building castles such as motte and baileys nearby. Next they moved to turn the settlement into a planned town, laying out formal streets and property boundaries. At first the settlement thrived and the population grew- trade flourished, and the locals continued to use the by now ancient cemetery to bury their dead. However, hard times lay ahead for the town of Ardreigh. The ever-growing power of nearby Athy slowly began to draw resources and people from the settlement. In the 14th century the terrible plague of the 'Black Death' descended on Ireland, killing large numbers of the population. Warfare also became more commonplace, with raids on Kildare's Anglo-Norman colony increasing from groups such as the Gaelic-Irish of the Dublin and Wicklow Mountains. All of these factors combined to weaken the settlement of Ardreigh, and over the centuries its population declined. By the end of the 16th century the last inhabitants had all but departed, and the once bustling



settlement disappeared, although the cemetery remained in use until the present. Ardreich's houses and streets slipped beneath the fields, to become just another part of Kildare's agricultural landscape. So it would remain, forgotten, until the archaeologists arrived 500 years later.

The Irish Archaeological Chronology

Archaeology in Ireland is divided into a number of different periods. These include broad timespans such as the Mesolithic, or 'Middle Stone Age' and Neolithic, or 'New Stone Age.' Within these timespans there are often further classifications, such as Early Mesolithic and Late Mesolithic, when there is a noticeable change in the types of stone tools people in Ireland made. Archaeologists classify these periods based on elements such as this; differences in material culture (the types or form of objects people used), differences in the way they built their houses, or buried their dead or practiced their religion. When new knowledge and new research comes to light these periods can be modified, but the table below shows the current thinking on the history of human settlement on the island.



Archaeologists enjoying the sunshine on site in Ardreich

IRISH ARCHAEOLOGICAL CHRONOLOGY

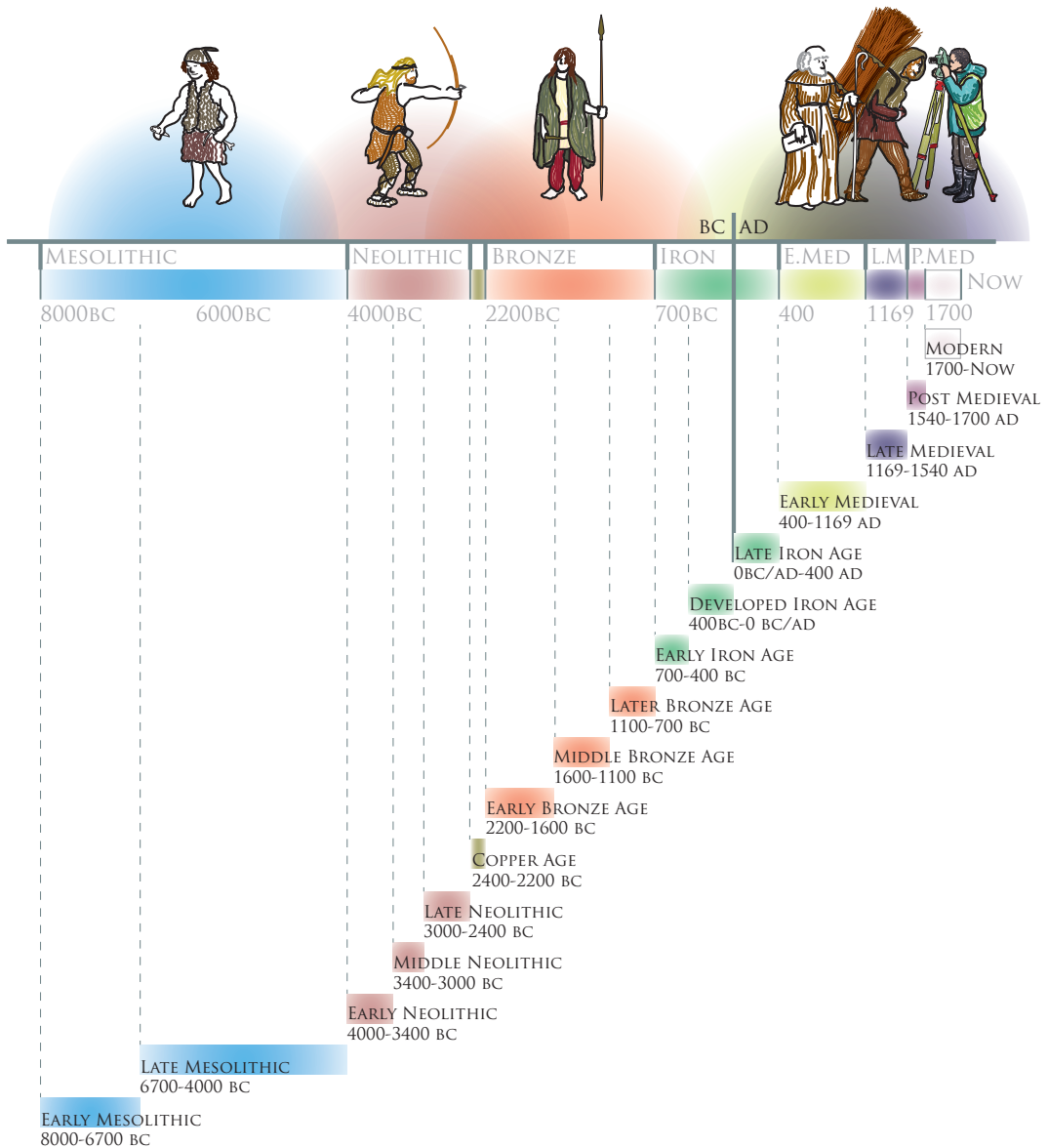


Illustration: Jonathan Millar

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