



## UNCOVERING THE PAST

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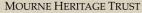
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This guide delights in having the opportunity to navigate you through the archaeological, geological and natural heritage of the South East region of Ulster – which without a doubt is one of the best-kept secrets in Europe.

This region is a unique place of great beauty and fascinating history. People have lived here for some 6,000 years and surviving today is a rich inheritance of Pre and Post Christian historical sites to be explored. The area contains the remains of twenty or so large stone tombs or Dolmens. Many of them, such as Ballymacdermott, are situated in prominent positions with magnificent views over the surrounding countryside. The South Cairn on the summit of Slieve Gullion has the distinction of being the highest surviving Passage Tomb in Britain and Ireland and an outstanding example of a portal tomb can be found at Ballykeel. Excavations at several of these burial monuments have uncovered stone tools, pottery and human remains. Many more historical attractions are waiting to be explored such as Killevy Old Church and the 17th century Moyry Castle, built as an outpost to guard the gap of the North.

The geological and natural heritage of the region is just as captivating. It is characterised by the undulating countryside known as the Ring of Gullion, a series of low-lying hills that encircle the heather-clad Slieve Gullion Mountain. This complex owes its dramatic mountainous origins to massive volcanic forces, which occurred around 60 million years ago. The ring of small mountains and hills encircling Slieve Gullion are technically known as a ring dyke. The Ring of Gullion is claimed to be the most spectacular example of a ring-dyke intrusion in Western Europe. Over the years this site has attracted geologists from all over the world and featured in a number of new theories that have been put forward to explain the unusual rock relationships identified. Some of these theories have now become an accepted part of geological science.

This is in contrast to the neighbouring Mourne Mountains, which were formed over 56 million years ago. They are comprised of 12 peaks over 2000 feet high, including Ulster's highest mountain, Slieve Donard. The Mournes are unusual in that their summits are grouped together in a compact area only 7 miles in breadth. Valleys intersect at varying width and depth while the mountain slopes descend to the sea and low-lying drumlin topography to the west and north

The South East Region of Ulster has been marked out as a special place by the people who have lived in the area over the years and their feelings about the landscape have been expressed through the ages in local literature, poetry, music, folk, history and art. This thriving heritage has survived until the present day and offers a warm and friendly welcome for those wishing to experience the unique culture of the area.









www.south-armagh.com

www.mournelive.com

www.newryandmourne.gov.uk

www.armagh.gov.uk

www.armaghanddown.com







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## **Slieve Gullion** Sliabh gCuilinn





Looking west from the slopes of Slieve Gullion across to the hills of the Ring of Gullion, the peaceful patchwork of fields belie the volcanic origin of this ancient landscape. The hills of the ring follow a circular fracture, or fault, in the Earth's crust and some of the rocks here include basalt which was erupted as lava through volcanoes that existed here around 58 million years ago.

### Slieve Gullion - it's volcanic roots! Sliabh gCuilinn - a bhunús bolcánach

Rising some 576m above the surrounding countryside, the broad slopes of Slieve Gullion dominate the landscape of south Armagh. The mountain itself lies at the centre of a pronounced ring of hills - the Ring of Gullion. Together these features are a testament to more violent times in this part of Ireland for they are both of volcanic origin. Both the mountain and its surrounding ring of hills represent the, now much eroded, heart of a volcano that existed here around 60 million years ago. At that time, both Europe and North America were still joined together. However, as the two continents began to move apart (due to forces deep within the Earth), resulting tension in the Earth's crust caused large volumes of rock at depth to melt and this molten rock, or magma, was erupted at the surface through large volcanoes. By following the Slieve Gullion Forest Park Drive it is possible to see evidence of those more violent times.

Just before you reach the first car park along the drive some of the most interesting rocks on Slieve Gullion can be seen on the right hand side of the road. Here the intricate relationships between the light and dark rocks have caused much debate amongst the scientific community about how these rocks and indeed Slieve Gullion as a whole came to be. It was thought that Slieve Gullion was made up of altered layers of lava that were erupted from the volcanoes here 60 million years ago. A more favoured explanation however suggests that the layers of dark basalt-like rock and light granitelike rock never erupted as lava at the surface. The dark-coloured rock is called dolerite. Dolerite is an igneous rock that formed from the slow cooling of magma deep in the Earth's crust. Near-horizontal sheets of dolerites are interbanded the other igneous rock, granophyre, which also formed from the cooling of magma deep underground. Together they make up Slieve Gullion and they give it a somewhat stepped profile.

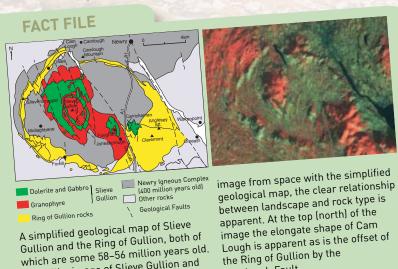
### The Summit - loughs, cairns and legends An Barr - lochanna, cairn agus finscéalta

A path from the north end of this car park leads to the summit of Slieve Gullion from where spectacular views extend across a wide part of Ireland. The pillar on the summit has a chart on top pointing to the hills in the distance telling you what they are and how far they are from you. At the

summit you will notice that there is a significant mound of stones. This cairn, known locally as "Calliagh Berra's House" is the highest surviving passage tomb in Ireland. A smaller stone cairn lies just to the north, just past Lough Calliagh Berra. The tombs probably date back to the Bronze Age and Neolithic times. According to legend, Fionn Mac Comhaill was bewitched by Miluchra at Lough Calliagh Berra. He was lured into the pool where he emerged a wizened white-haired old man. The superstition survives today that should you bathe in the lough your hair will turn white!

### Ring of Gullion - an ancient ring of fire Compal Shliabh qCuilinn - seanchompal tine

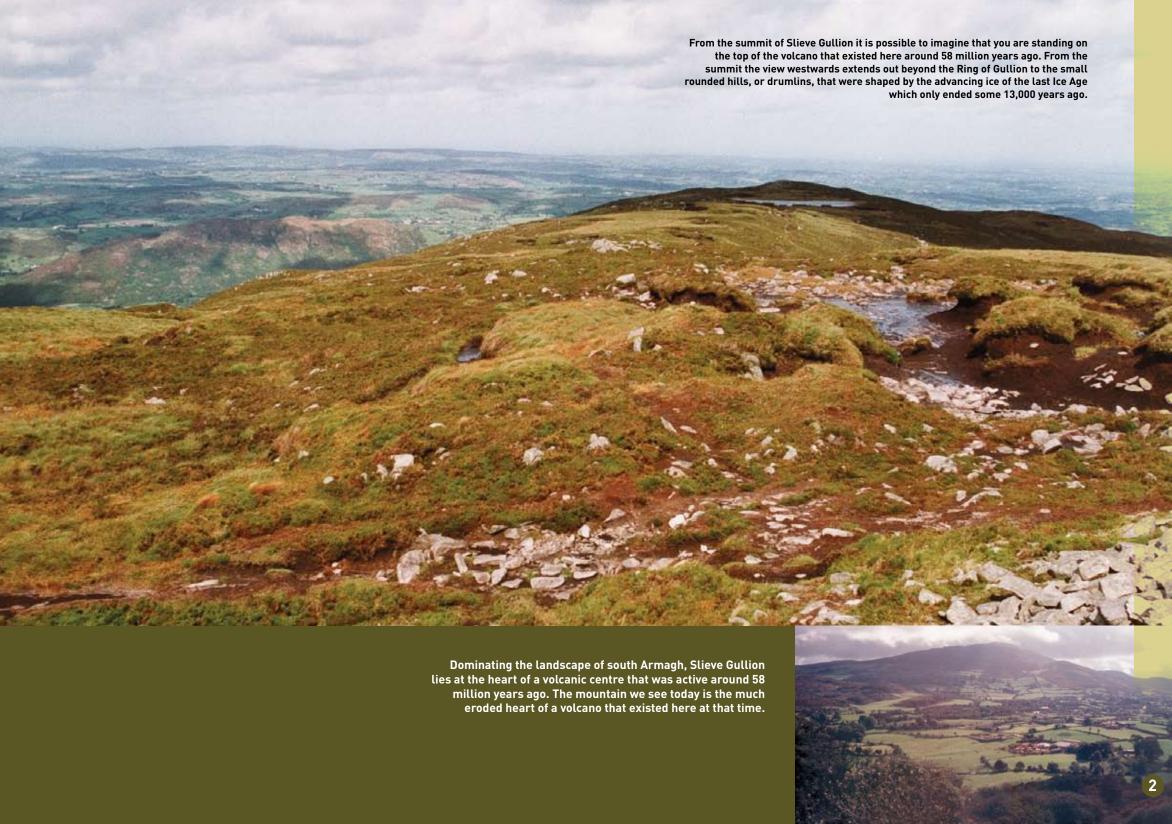
From the summit the circular lines of hills making up the Ring of Gullion can also be seen. The hills of the Ring are up to 300m and follow the line of a circular fracture, or fault, in the Earth's crust. The rocks that make up these hills are dolerite, gabbro and felsite, all of which cooled from magma deep underground. However some parts of the hills are made up of basalt, volcanic glass, volcanic tuffs and volcanic breccia and the existence of these are evidence of, occasionally explosive, volcanic activity at the surface here 60 million years ago.



Camlough Fault.

A satellite image of Slieve Gullion and

the Ring of Gullion. By comparing this



## Bernish An Bearnas

## SOUTEARWAGE

THE RING OF GULLION - A VOLCANIC LANDSCAPE



The Ring of Gullion, Cooley and Mourne Mountains form the backdrop to the Ballymacdermot Court Grave. This once violent 58 – 56 million year old volcanic landscape now provides a peaceful resting place for those that were buried here only 4 or 5,000 years ago.



Earth 480 million years ago



Earth 418 million years ago

#### The Ring of Gullion – a volcanic landscape Compal Shliabh gCuilinn – tírdhreach bolcánach

Bernish Viewpoint sits on the slopes of Camlough Mountain just west of Newry. The view here gives a spectacular view south-west to the rounded slopes of Slieve Gullion as well as to the circular line of hills that surround it, the Ring of Gullion. Both the Ring of Gullion and Slieve Gullion have their origins in volcanic activity that rocked this area around 56 - 58 million years ago. At that time the European and North American continents were still joined together. However, as they began to drift apart, a process that eventually led to the creation of the North Atlantic Ocean, large volumes of rock at depth began to melt. Some of this molten rock, or magma, cooled deep underground into rock but some of it made the surface where it was erupted, sometimes explosively, through volcanoes.

Slieve Gullion is made up of alternating layers of dark basalt-like rock and light granite-like rock never erupted as lava at the surface. The rocks that make up the ring follow a circular fracture, or fault, that encircles Slieve Gullion. These rocks also include dolerite as well as gabbro and felsite, all of which cooled from magma deep underground. However, rocks such as basalt and volcanic agglomerate are also found in the ring hills. These rocks are formed from lava and volcanic explosions and indicate the occurrence of volcanic eruptions in this area some 58 million years ago.

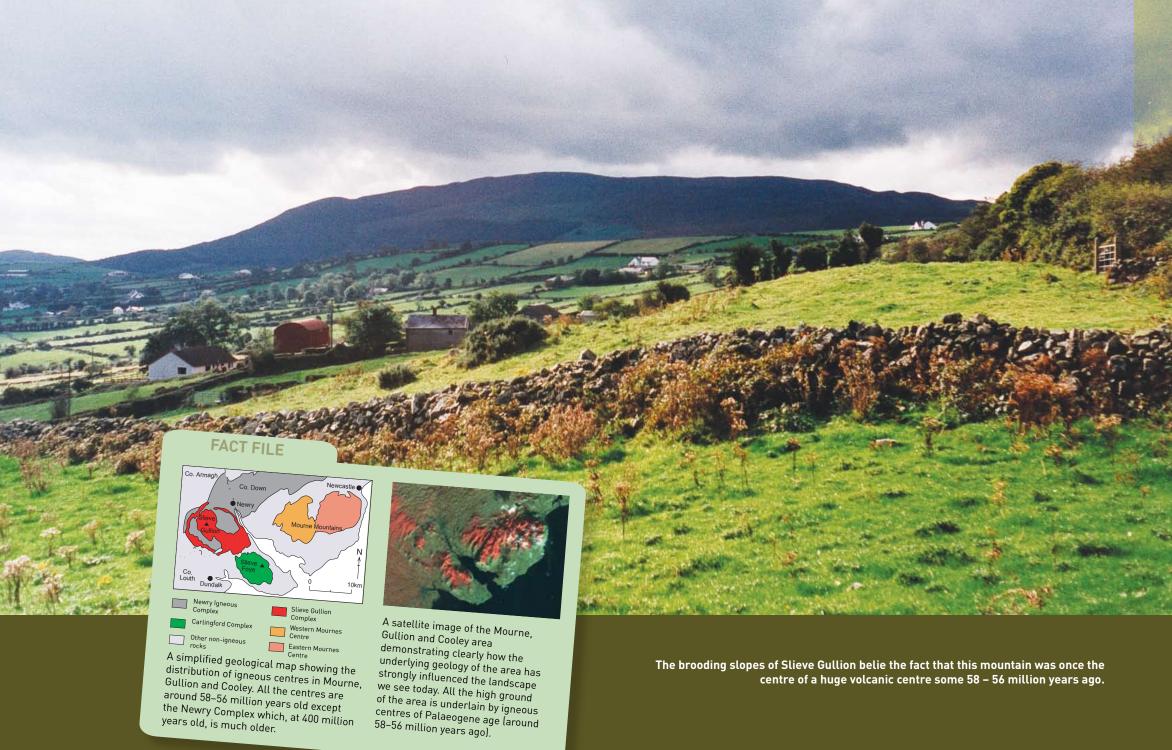
### Camlough Mountain – disappearing oceans Sliabh gCircín – aigéin gan rian

56 - 58 million years ago wasn't the only time this part of Ireland experienced igneous activity. The rocks that make up Camlough Mountain, on which you are standing is called granodiorite. Granodiorite, just like the rocks that make up Slieve Gullion, forms from the cooling, deep underground, of molten magma. However unlike the rocks that make up Slieve Gullion and the Ring of Gullion, the granodiorites of Camlough Mountain are around 400 million years old. Whereas the younger rocks of Gullion are associated with igneous activity related to the formation of the present day Atlantic Ocean, the rocks of Camlough Mountain are associated with igneous activity related to the present

day Atlantic, the now long-disappeared lapetus Ocean. This lost ocean disappeared as ancient continents moved together and eventually came into collision between 470 and 400 million years ago. In the final stages of this long, complicated process, large volumes of magma were generated deep in the Earth's crust. They later cooled to form the granodiorirte we see today. These continental collisions not only created a range of mountains of Himalayan proportions (the eroded remains of which form today's Sperrin and Donegal Mountains) but it also stitched together the two parts of Ireland (the north and west as well as the south and east) which had been stranded on parts of different continents on opposite sides of the lapetus Ocean.

#### Ballymacdermot - The Cashla Baile Mhic Dhiarmada - An Caiseal

Close by is the Ballymacdermot Court Grave. Dating from Neolithic times, around 6,000 - 4,000 years ago, the grave provides evidence for some of the earliest farming communities to live in this area. Excavations here in 1962 found the remains of cremated bones and the thin soil on the site contains fragments of charcoal indicating the area had been burnt prior to the building of the monument. Known locally as "The Cashla," the grave is reputed to be haunted!



## Cam Lough Cam Loch

## SOUTHARWAGE

CAM LOUGH - WHERE THE RING OF GULLION BREAKS



Tranquil Cam Lough is elongate in shape and occupies a trough carved by ice during the last Ice Age. The ice excavated deep into a zone of weakness here created by a fracture, or fault, in the Earth's crust. This fault offset the hills that make up the Ring of Gullion by up to 2km during a series of earth movements over 50 million years ago.

### Cam Lough – where the Ring of Gullion breaks Cam Loch – Bearna i gCompal Shliabh gCuilinn

The often calm, tranguil waters of Cam Lough stretch for just over two kilometers in a north-west to south-east direction. This narrow, elongate lough provides rich waters for the fisherman and marks a break in the lines of hills that surround Slieve Gullion, the Ring of Gullion. Infact, Cam Lough marks the point where the Ring of Gullion is broken, or offset. On the western side, the ring of hills intersects Cam Lough at its northern end at Sturgan Mountain. However, on its eastern side, the ring of hills intersects the lough halfway down its eastern shore, just where you are at the moment. The RIng of Gullion was once a continuous, unbroken ring of hills made up from rocks that were once molten and which were intruded into, and erupted out of volcanoes, that followed a circular fracture, or fault, that existed here 58 - 56 million years ago. A younger fault then developed here, running in a north-west to south-east direction and the rocks on either side were displaced. Geologists have estimated that the total movement along this Cam Lough Fault was up to 2km. This movement didn't happen in one go but resulted from a series of much shorter movements (a few metres at a time) that occurred over a much longer period of time (probably over several million years). Each time movement occurred on this fault, it would have been felt by animals living here at the time as an earthquake. Thankfully, it is a very long time since the Cam Lough Fault moved and earthquakes in south Armagh are a feature only of our distant geological past!

## Camlough Mountain – from the fiery depths of the Earth

### Sliabh gCircín - ó thinte an domhain

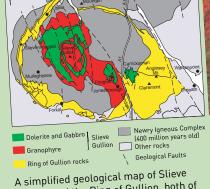
56 - 58 million years ago wasn't the only time this part of Ireland experienced igneous activity. The rock that makes up most of Cam Lough Mountain, which dominates the eastern side of Cam Lough, is called granodiorite. Granodiorite, just like the rocks that make up Slieve Gullion, forms from the cooling, deep underground, of molten magma. However unlike the rocks that make up Slieve Gullion and the Ring of Gullion, the granodiorites of Camlough Mountain are around 400 million years old. The younger rocks of the Ring of Gullion were intruded into these older rocks and the contact between them can be seen in a quarry just 200m north from here. In the north face of the quarry the dark-coloured dolerite of the

younger Ring of Gullion can be seen to be directly in contact with the much older lighter-coloured granodiorite.

### Cam Lough – sculpted by ice Cam Loch – dealbhaithe d'oighear

Although the name is derived form the gaelic "Camloch," meaning "crooked lake," the lough is remarkably straight. It follows, very precisely, the line of the Cam Lough Fault, running for about 2.5km in the same north-west to south-east direction as the fault. The lough owes its existence here to the action of ice. Starting around 2.5 million years ago the global climate began to oscillate between periods of warmer climate and periods of extreme cold. During these cold periods, great sheets of ice would periodically cover large parts of Ireland as the world plunged into an Ice Age. As the ice advanced over the countryside it would erode deep into the underlying rock. Any weakness in this rock would be exploited by the ice which would erode deeper the area of weakness. The Cam Lough Fault has created such a weakness in the rock of south Armagh and it has been over deepened by the erosive action of ice allowing the waters of the present lough to infill the hollow that the ice has excavated.





A simplified geological map of Steve Gullion and the Ring of Gullion, both of which are some 58–56 million years old. A satellite image of Slieve Gullion and the Ring of Gullion. By comparing this

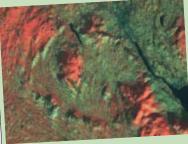


image from space with the simplified geological map, the clear relationship between landscape and rock type is apparent. At the top (north) of the image the elongate shape of Cam Lough is apparent as is the offset of the Ring of Gullion by the Camlough Fault.



The rocks of the Camlough area were born from fire. Over 400 million years ago, molten rock, or magma, cooled underground here to form the granodiorite that now makes up much of Camlough Mountain. 58–56 million years ago, once again there was magma present in this area, this time it cooled into rocks such as dolerite. In the nearby quarry the darker-coloured dolerite can be seen intruding into the much older, lighter-coloured grandiorite.

## Dane's Cast Fishery lascaireacht Chlaí na nDanar



THE DANE'S CAST - ANCIENT BARRIER



The Dane's Cast Fishery is a privately-owned trout fishery and is open to the public all year round except Christmas Day. The fishery's two spring-fed lakes are stocked with rainbow trout and anglers are offered a choice of 'catch and keep' or 'catch and release' options. Coaching for beginners is available on request.



Earth 480 million years ago



Earth 418 million years ago

### The Dane's Cast – ancient barrier Claí na nDanar – Bacainn Ársa

The gorse-covered mound on the hill behind the Dane's Cast Fishery is part of a long series of monuments known as the Dane's Cast. Little is known about the mound, nor indeed it's age, but it is believed to have been part of a defensive wall or fortification built for defense of Ulster, possibly around 250 A.D. In other areas it is known as the Black Pig's Dyke or the Worm Ditch. Nothing can be seen of the fortication today.

## The rocks of Jerrettspass- more ancient still Carraigeacha BhealachSheirit - níos sine fós

The rocks that underlie the fishery and much of the area around Jerrettspass are mainly greywacke (a type of sandstone), siltstone and mudstone. These rocks formed between 450 and 430 million years ago from sand and mud that was deposited on the . floor of an ancient ocean called lapetus that disappeared long ago. Just as the modern day Atlantic Ocean separates the Americas from Europe and Africa, so the lapetus Ocean also separated continents. On one side lay the huge continent of Laurentia and on the other side lay the continents of Baltica, Avalonia and Gondwana. Laurentia consisted of much of what is now North America but it also included the north and west of Ireland and part of Scotland. Avalonia lay thousands of kilometres away on the other side of the lapetus Ocean and included parts of Newfoundland and Nova Scotia as well as the south and east of Ireland! Rivers draining both continents carried sediment into the ocean where the sediment accumulated on the . floor, eventually compacting and hardening into rock. Over a period of many millions of years Avalonia, along with Baltica, moved closer to Laurentia causing that part of the lapetus in between them to shrink. By 420 million years ago the continents collided and the rocks of the former ocean floor were squeezed and heated and transformed into the hard greywacke we see today. At depth, molten rock or magma was generated and as it rose up into the Earth's crust it cooled and hardened into the igneous rock granodiorite. This granodiorite forms the Newry Igneous Complex which underlies much of the land south from here, including Newry itself.

### Drumlins - hills moulded by ice Droimníní - cnoic múnlaithe d'oighear

The landscape around the fishery is dominated by small, well rounded hills known as drumlins. Deriving their name from the gaelic, 'droimnín', meaning 'rounded hill' these hills are much younger than the rocks lying below. Starting some 2.5 million years ago, the climate of the Earth began to oscillate between periods of climatic warmth and periods of extreme cold during which great sheets of ice would bury large parts of the northern hemisphere, including much of Ireland. These cold periods are known as Ice Ages and the last ice sheet retreated from Ireland a mere 13,000 years ago. Around 14,500 years ago a shortlived period of extreme cold allowed ice to advance once again over much of the north of Ireland. As it advanced it moulded the ground below into the pear-shaped forms with the sharper end pointing in the direction of the flow of ice. After the ice melted, around 13,000 years ago, these rounded features were left behind as the drumlins we see today.



## Seagahan

## SOUTHARNACH

SEAGAHAN - BETWEEN RUGGED AND ROUNDED HILLS



From the summit of nearby
Carrigatuke ( a few kilometres
south of Seagahan) the view
extends east, north and
westwards over a sea of
drumlins. Seen from the air,
these small rounded hills that
were moulded into shape by ice
only 14,500 years ago, give the
landscape a 'basket of eggs'
appearance. In clear weather
the spires of Saint Patrick's
Cathedral in Armagh City (itself
built on drumlins) can be seen.

### Seagahan - between rugged and rounded hills

Seagahan Dam was built to supply water to nearby Armagh City, a short distance to the north, and has been stocked with both brown and rainbow trout. The reservoir sits between two distinct areas of landscape, as can be clearly seen by looking down on the area from space. To the north and west are the lowlands of central Armagh, typified by many small, well-rounded hills or drumlins. The drumlins form a continuous belt that runs southeastwards from Strangford Lough and the Ards Peninsula in County Down to County Longford. To the east and south lies the more hilly terrain of the Fews. Reaching their highest point at Carrigatuke (365m), 6 kilometres south of Seagahan, the Fews formed part of that once impenetrable barrier that lay between Ulster and Leinster.

## The rocks of Seagahan – lost oceans and colliding continents

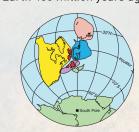
The rocks that underlie Seagahan are mainly greywacke (a type of sandstone), siltstone and mudstone. These rocks are between 450 and 430 million years old and were formed from sediment that was deposited on the floor of a long, lost ocean called lapetus. In Greek mythology lapetus was a Titan, the son of Uranus, the father of Prometheus and Atlas and an ancestor of the human race. The ancient lapetus Ocean was, in some ways. the father of the present Atlantic Ocean. Just as the modern day Atlantic separates the Americas from Europe and Africa, so likewise the lapetus also separated continents. On one side lay Laurentia and on the other lay the continents of Baltica, Avalonia and Gondwana, Laurentia consisted of much of what is now North America but it also included the north and west of Ireland. Avalonia lay thousands of kilometres away on the other side of Japetus and it included parts of Newfoundland and Nova Scotia as well as the south and east of Ireland! Rivers draining both continents carried sediment into the lapetus where it accumulated on the ocean floor. eventually compacting and hardening into rock. Over a period of many millions of years Avalonia, along with Baltica, moved closer to Laurentia causing that part of the lapetus in between them to shrink. By 420 million years ago the continents were in collision and the rocks of the former ocean floor were squeezed and heated and transformed into the hard greywacke we see today.

#### Drumlins - hills moulded by ice

North and west of Seagahan the landscape is dominated by drumlins. Deriving their name from the gaelic, "dromnín," meaning "rounded hill" these hills are much younger than the rocks lying below. They are a product of the last Ice Age that retreated from this area only a mere 13,000 years ago. Starting some 2.5 million years ago, the climate of the Earth began to oscillate between periods of climatic warmth and periods of extreme cold during which great sheets of ice would bury large parts of the northern hemisphere, including much of Ireland, - the Ice Ages. Around 14,500 years ago a short-lived period of extreme cold allowed ice to advance once again overmuch of the north of Ireland. As it advanced it molded the ground below into the pear-shaped forms with the sharper end pointing in the direction of the flow of ice. After the ice melted, around 13,000 years ago, these rounded features were left behind as the drumlins we see today.

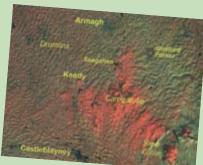


Earth 480 million years ago



Earth 418 million years ago

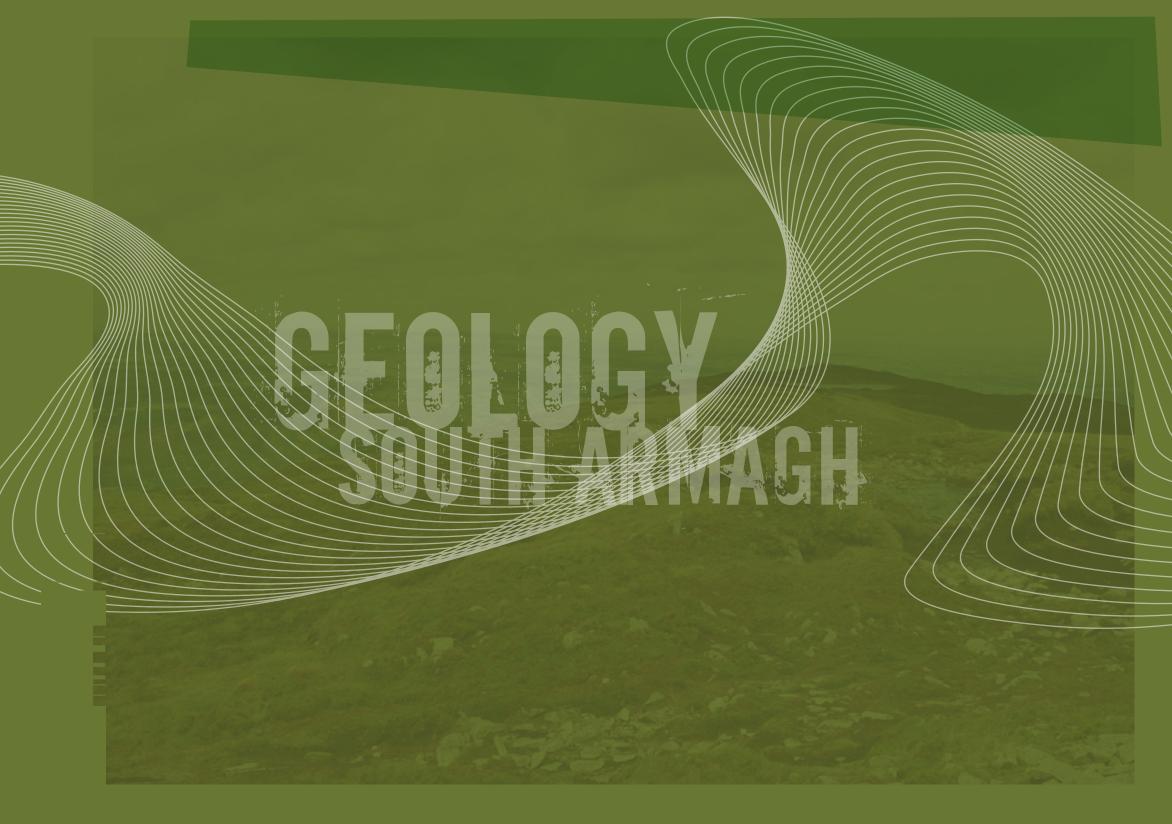
#### FACT FILE

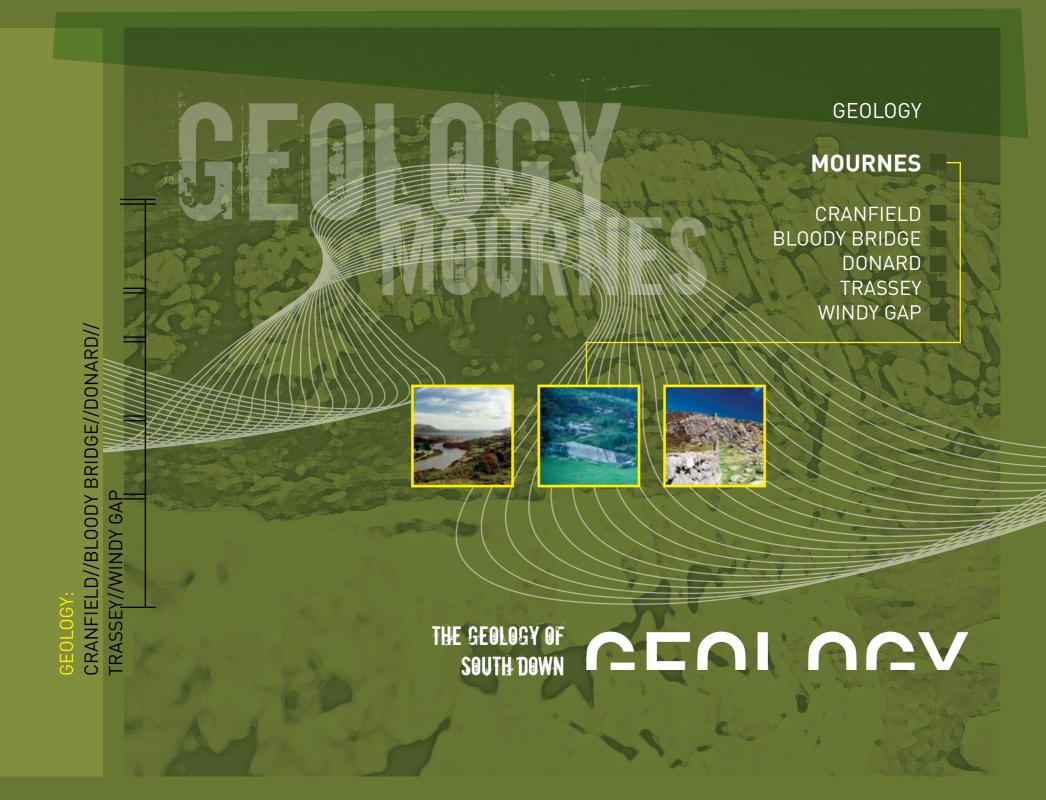


Seen from space, the landscape of this part of County Armagh is one of contrasts. South of Seagahan is the higher ground of The Fews and Slieve Gullion while north of Seagahan are the ice-shaped drumlins. Seagahan sits at the boundary between these two landscape areas.



Seagahan Dam was built to provide water to nearby Armagh City. The dam was constructed of Newry granodiorite, a 400 million year old igneous rock that was intruded into the Earth's crust a short distance south from here as molten magma. The magma was intruded into slightly older sedimentary rock called greywacke that collected as sand and mud on the fl oor of the long disappeared lapetus Ocean. It is this greywacke that underlies Seagahan.







## Cranfield Creamhchoill

CARLINGFORD - A TRUE FJORD?



A 330 million year old fossil coral in limestone just west of Cranfield. Fossils are the remains of plants and animals that lived at the time these rocks were forming. The coral tells us that at the time it was alive, this area was under a tropical shallow sea close to the equator!

#### Carlingford – a true fjord? Cairlinn – fíor fjord?

Cranfield sits at the most southerly point of County Down and guards the entrance to Carlingford Lough. The area takes its names from the gaelic, "Creamhchoill," meaning "wild-garlic wood." The lough derives its name from the Old Norse, "Kerlingfjörthr" meaning, "fjord of the hag." A fjord is a river valley that has been deepened by a glacier and then, after the ice melted, has been flooded by the sea. Ice has covered this area many times during the last 2.5 million years in a series of Ice Ages and, probably, on several occasions glaciers have torn through what is now Carlingford Lough, steepening and deepening the valley here. While not as spectacular as many of the classic fjords of Norway, the former glaciated Carlingford valley has also now been flooded by the sea and is therefore a true fjord.

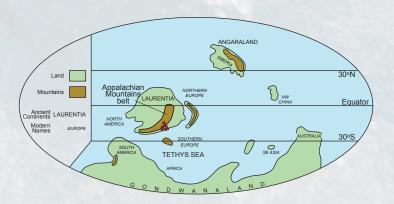
## Cranfield – ancient coral seas! Creamhchoill – seanfharraige choiréalach

On the beach a short distance west from here there are exposures of rock that contain fossils. The rock is a blue-grey coloured limestone and the fossils are those of corals and brachiopods (shelly animals). The rock is over 330 million years old and was formed from consolidated lime-rich mud that accumulated on the floor of a warm, shallow tropical sea that covered this area at the time. The presence of corals indicates that the sea was very clear. At that time, Ireland straddled the equator and the environment that these animals lived in was akin to a present day coral reef! Also on the beach here a pronounced band of darker rock can be seen running through the limestone. This feature, known as a dyke, is made of the igneous rock dolerite. It formed as molten magma filled an underground vertical crack in the Earth's crust where it cooled and solidified. There are good views from this point across to Block House Island and the lighthouse that guard the entrance to Carlingford Lough.

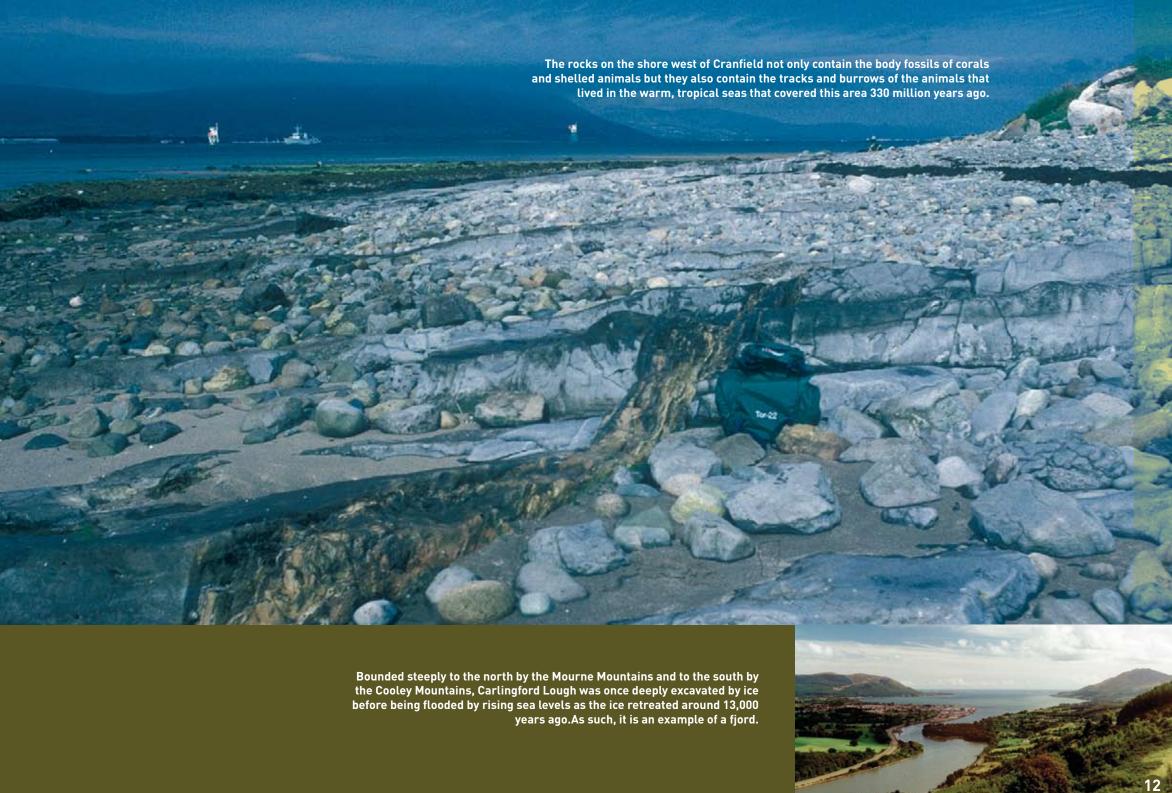
A short distance further west along the beach you soon pass some more exposures of rock, this time sandstone as well as limestone. The presence of sand indicates that the water would have been less clear and, therefore, less favourable for corals. However, these rocks still contain fossils though instead of corals, they contain "trace fossils", the tracks, trails and burrows of animals that lived here over 330 million years ago.

## Mill Bay - a tragic story Cuan an Mhuilinn - scéal tragóideach

From that point the sheltered waters of Mill Bay can be seen ahead. An old story tells of the tragic Mary Mac Ceon. A few days before her wedding day, her betrothed Joseph Mac Cunigem, set off on his fishing boat promising to return "with the flowing evening-tide on the wedding eve, calm or storm". That evening however a great storm blew up and Joseph's boat was last seen struggling to make port. It soon became clear however that the boat, and its crew, had been lost and Mary was broken hearted. She then remembered his parting words and ran to the beach to await his arrival. Just then a great wave dumped his lifeless corpse at her feet. Stricken with grief, Mary clung to her dead partner, oblivious to the rising tide around her. When she realised her danger, it was too late and their bodies were discovered entwined the next morning on what should have been her 21st birthday and their wedding day.



Earth 330 million years ago



## Bloody Bridge Droichead na Fola

BLOODY BRIDGE - A LEGACY OF ICE



The rocks exposed in this lay-by between Bloody Bridge and Newcastle are greywackes. They were laid down as muds and sands on the floor of the now long-disappeared lapetus Ocean over 430 million years ago.

### Bloody Bridge – a legacy of ice Droichead na Fola – Oidhreacht Oighir

Bloody Bridge is named after a massacre of prisoners that occurred here during the 1641 rebellion as they were being transported from Newry to Newcastle. The old bridge sits slightly inland from the modern day bridge. The valley of the Bloody Bridge River is guite large compared to the relatively small river that currently drains it. In fact the valley is too large to have been excavated by the present day river. As with much of the Mournes, it was ice that excavated this valley. Starting around 2.5 million years ago the global climate began to oscillate between periods of warmer climate and periods of extreme cold. During these cold periods, great sheets of ice would periodically cover large parts of Ireland as the world plunged into an Ice Age. As the ice advanced over the countryside it would erode deep into the underlying rock. As it cut into the rock it picked up loose stones and boulders that not only increased the erosive power of the ice but which has ground down into sand and gravel within the ice. Some of this sand, gravel and boulders left behind as the ice melted, some 13,000 years ago, can be seen on the southern side of the bridge.

The road here is built on a platform that runs parallel to the coast southwards from here to Annalong and beyond. This platform is an example of a raised beach and indicates that the coastline here was once a few metres further inland than it is today. At the end of the last Ice Age (around 13,000 yeas ago), global sea levels rose quickly as the water locked up in the great ice sheets began to melt. It was at this time that this raised beach was formed. Later, and more slowly, the land began to rebound upwards as the weight of the ice was removed and, as the land rose, the sea retreated slightly leaving the former beach high and dry.

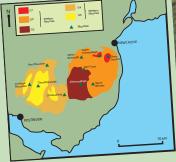
### The Mourne Mountains – born of fire Sléibhte Mhúrna – déanta de thine

The dramatic upland landscape of this part of south Down is mostly a testament to events that occurred here some 60 -55 million years ago. At that time the European and North American continents began to spilt apart, leading to the formation of the North Atlantic Ocean. The line of rupture was, in reality, a wide zone where large fractures, or fissures, began to form (similar to the east African rift valley today). North-east Ireland lay within this zone and as the Earth's crust was stretched and thinned

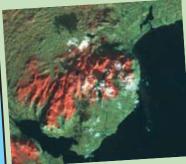
large volumes of rock were melted at depth generating large reservoirs of molten rock, or magma. While further north, the magma reached the surface where it was quietly erupted as lava (as at, for example, the Giant's Causeway), in this area the magma never erupted at the surface but cooled underground where it hardened into granite. Again, millennia of erosion and weathering have now exposed this subterranean magma chamber to the surface, the hard granite now forming the highest ground in the region, the Mourne Mountains. More precisely the Mourne granites were formed by successive injections of magma at two centres. The eastern centre, today marked by higher peaks, has three distinctive granites while the western centre, today marked by lower peaks, has two.

The rocks into which all this molten magma was intruded were affected by contact with molten rock. The "country rock" of this region was typically a greywacke, a mixture of sand and mud that had been deposited on the floor of an ancient ocean, close to the edge of a continental shelf, over 420 million years ago. Wherever the greywacke has been in contact with magma it has, quite literally, been baked and altered. The boundary between the greywacke and the granite can be seen a short distance along the Brandy Pad here in the bed of the Bloody Bridge River.

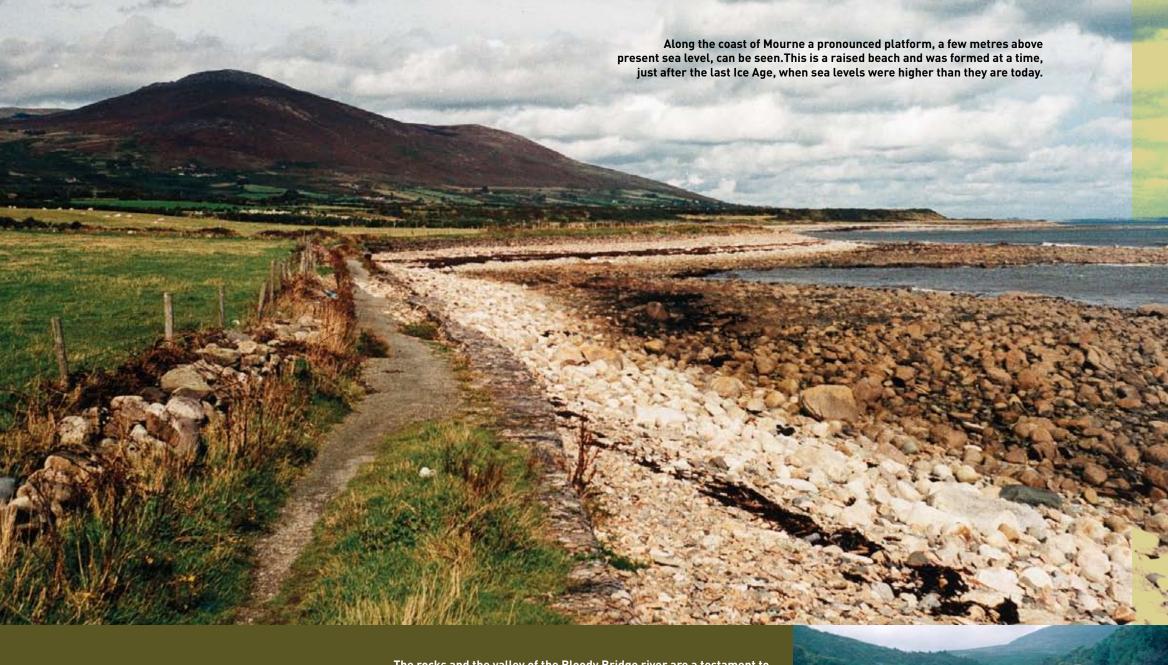
#### **FACT FILE**



A simplified geological map of the Mourne Mountains showing the distribution of the five main types of granite which together make up this dramatic range of mountains.



A satellite of the Mourne Mountains. Note that the highest peaks are in the eastern Mournes and are composed of the G1, G2 and G3 granite types.



The rocks and the valley of the Bloody Bridge river are a testament to times when this area was very different from today. The rocks are granites and solidified from molten rock, or magma, underground here around 58 – 56 million years ago. The deep and wide valley was excavated by glaciers during the last Ice Age (which ended only 13,000 years ago) and is now occupied by the small river we see today.

## **Donard Park**

MOURIES

THE MOURNES - WHAT'S IN A NAME?



As you walk uphill along the Glen River, the rock in the river bed changes from the 430 million year old greywacke to the younger, but much harder, 58 – 56 million year old granite. In this picture, just below the 'ice house" large flat slabs of Mourne granite are exposed around the river bed.

#### The Mournes - What's in a name?

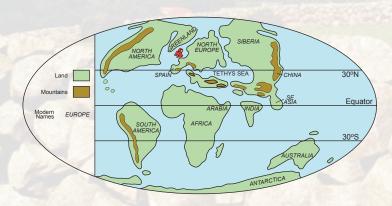
The Mourne Mountains rise dramatically from the coast of south Down and, at just less than 900m, they contain the highest peaks in the province of Ulster. The Mournes are known in gaelic as "Na Beanna Boirche" or "Boirche's Mountains". They are named after Boirche, the chief shepherd of Ross the Red, son of Imchadh, the third century king of Ulster. Boirche was widely renowned not only for his generosity but also for his talent as a musician. There are many stories about Boirche including one involving the Garb Mac Tire, a were-wolf who terrorised Boirche's herd. The wolf was eventually cornered and killed by Boirche and his men but not before the creature had killed Boirche's chief shepherd and many of his dogs. The present day name of the mountains derives from a clan called Múrna who migrated here from Monaghan in the 12th century.

At 853m, Slieve Donard is the highest point in the Mourne range. The mountain is named after "Dónairt" or "Domangard," the son of the last pagan ruler of the area. He was converted to Christianity by Saint Patrick and then lived on the mountains as a holy hermit.

### Drifting continents – the origin of the Mournes

Slieve Donard, like the rest of the Mourne Mountains is made up from the igneous rock granite. This hard rock crystallized out from a reservoir molten rock, or magma, that existed deep underground here around 56 million years ago. At that time the European and North American continents began to spilt apart, eventually leading to the formation of the North Atlantic Ocean. The line of rupture was, in reality, a wide zone where large fractures, or fissures, began to form (similar to the east African rift valley today). North-east Ireland lay within this zone and as the Earth's crust was stretched and thinned large volumes of rock were melted at depth generating large reservoirs of molten rock, or magma. While further north, the magma reached the surface where it was quietly erupted as lava (as at, for example, the Giant's Causeway), in this area the magma never erupted at the surface but cooled underground where it hardened into granite. Millennia of erosion and weathering have now exposed this subterranean magma chamber to the surface, the hard granite now forming the Mourne Mountains. More precisely the Mourne granites were formed by successive injections of magma at two centres. The eastern centre, today marked by higher peaks, has three distinctive granites while the western centre, today marked by lower peaks, has two.

The rocks into which all this molten magma was intruded were affected by contact with molten rock. The "country rock" of this region was typically a greywacke, a mixture of sand and mud that had been deposited on the floor of an ancient ocean, close to the edge of a continental shelf, over 420 million years ago. Wherever the greywacke has been in contact with magma it has, quite literally, been baked and altered. The boundary between the greywacke and the granite can be seen a short distance upstream along the Glen River on the lower slopes of Slieve Donard just where the river flows over a large, flat sheet of rock. While most of Slieve Donard (and Slieve Commedagh to it's west) is made up of one variety of granite, the summits of both mountains are composed of a different, slightly older variety of granite. Each granite has a distinctive mineral composition and appearance that reflects the chemistry of the original magma.



Earth 60 million years ago



## **Trassey**

## MOURNES

THE MOURNES - WHAT'S IN A NAME?



The Hare's Gap and Slieve
Bernagh from the Diamond Rocks
along theBrandy Pad. Once used
by smugglers, the Brandy Pad
now takes walkers into the heart
of Mourne Granite County. All the
mountains in this photograph are
made up of the G2 granite variety.

#### The Mourne Mountains – from the fiery depths

The dramatic upland landscape of this part of County Down is mostly a testament to events that occurred here some 60 -55 million years ago. At that time the European and North American continents began to spilt apart, leading to the formation of the North Atlantic Ocean. The line of rupture was, in reality, a wide zone where large fractures, or fissures, began to form (similar to the east African rift valley today). North-east Ireland lay within this zone and as the Earth's crust was stretched and thinned large volumes of rock were melted at depth generating large reservoirs of molten rock, or magma. Further north, the magma reached the surface where it was quietly erupted, eventually flooding the landscape with thick flows of basalt lava. This lava is seen most spectacularly in the columns of basalt at the Giant's Causeway.

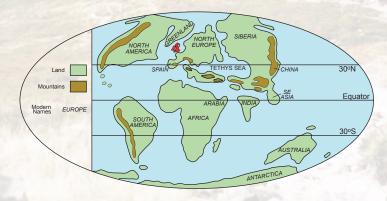
However another pulse of magma was generated in this area. This magma however never erupted at the surface as lava but cooled underground where it hardened into granite. Again, millennia of erosion and weathering have now exposed this subterranean magma chamber to the surface, the hard granite now forming the highest ground in the region, the Mourne Mountains. More precisely the Mourne granites were formed by successive injections of magma at two centres. The eastern centre, today marked by higher peaks, has three distinctive granites while the western centre, today marked by lower peaks, has two.

The rocks into which all this molten magma was intruded were affected by contact with molten rock. The "country rock" of this region was typically a greywacke, a mixture of sand and mud that had been deposited on the floor of an ancient ocean, close to the edge of a continental shelf, over 420 million years ago. Wherever the greywacke has been in contact with magma it has, quite literally, been baked and altered. This greywacke can be seen along the path as you follow the path from here up towards the Hare's Gap along the Trassey Track. The boundary between the greywacke and the granite more or less corresponds to the boundary between the pastureland (underlain by greywacke) and the upland moor (underlain by granite).

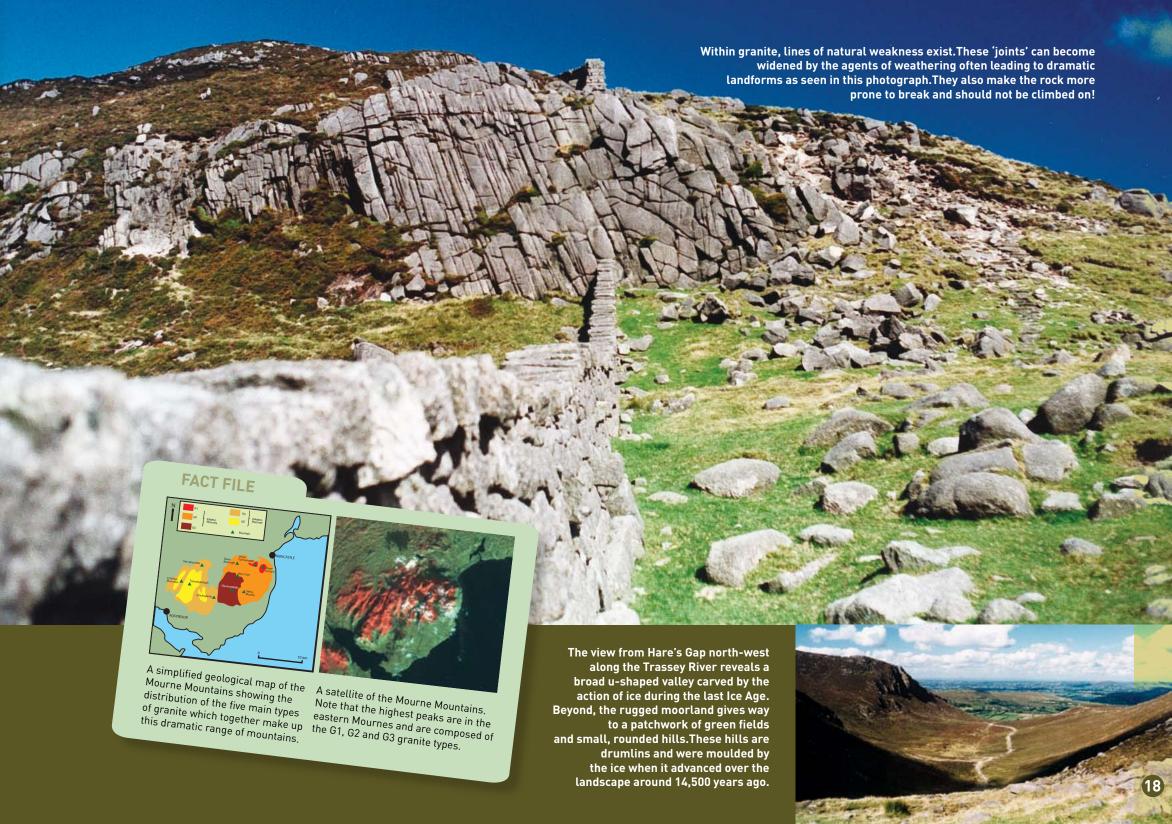
#### The mountains today - a legacy of ice

The Hare's Gap at the head of the Trassey Track is a u-shaped lip of rock beyond which lies the heart of the Mournes. The gap was formed during the Ice Age (which ended around 13,000 years ago). At that time, the Earth's climate had cooled allowing great sheets of ice to develop which buried most of Ireland under a frigid blanket some 1km deep in parts. In the Mournes, mountain glaciers developed and as they grew, they cut down into the hard granite. They also cut backwards, wearing the hard granite away. At the Hare's Gap, two glaciers formed and eroded backwards towards each other, eventually only the thin lip of rock seen today separating them.

The jagged top of Slieve Bernagh perhaps forms the most distinctive summit of the Mourne Mountains. The rugged summit is created by tors – a common feature of granites. They form by preferential erosion along the joint surfaces of granite. These are lines of weakness within the rock itself. Further evidence for such joints can be seen at the Castles of Commedagh – a spectacular feature of granite erosion just below Slieve Commedagh, a few kilometres on your left along the Brandy Pad beyond the Hare's Gap. Such features however are very unstable so please admire from a distance only!



Earth 60 million years ago



## **Windy Gap**

# VOURIES

ON THE SLOPES OF SLIEVENABOLEY MOUNTAIN



From the high ground of Windy Gap or, as above, from the summit of Slieve Croob, the drumlins that are so typical of much of County Down are obvious. These small rounded hills formed as ice advancing over the landscape during the last Ice Age (around 14,500 years ago) moulded the land and soil below it.

Windy Gap lies on the slopes of Slievenaboley Mountain, which rises up to the west here. The gap forms a watershed between several different types of landscape. Ahead to the south-east the Mourne Mountains rise up dramatically from a sea of small rounded hills. To the east (left) are the slopes of Slieve Croob where the River Lagan begins its short journey to Belfast and the open sea. Behind and to the north-west the high ground gives way to a green patchwork of more small rounded hills that stretch away as far as the eye can see. The stories behind the formation of these different landscapes include tales of molten rock, great sheets of ice, the collision of continents and a time span of hundreds of millions of years!

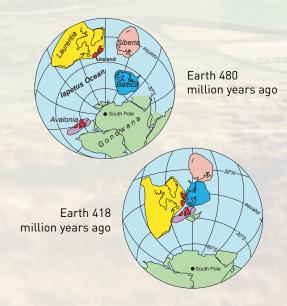
The rocks that underlie much of the low ground visible from Windy Gap are mainly greywacke (a type of sandstone), siltstone and mudstone. These rocks are between 450 and 430 million years old and were formed from sediment that was deposited on the floor of a long, lost ocean called lapetus. While in Greek mythology lapetus was the father of Atlas, the ancient lapetus Ocean was, in some ways, the father of the present Atlantic Ocean. Just as the modern day Atlantic separates the Americas from Europe and Africa, so likewise the lapetus also separated continents. On one side lay Laurentia (much of present day North America but also the north and west of Ireland) and on the other lay the continents of Baltica, Avalonia (including the south and east of Ireland) and Gondwana. Rivers draining both continents carried sediment into the lapetus where it accumulated on the ocean floor, eventually compacting and hardening into rock. Over a period of many millions of years Avalonia, along with Baltica, moved closer to Laurentia causing that part of the lapetus in between them to shrink. By 420 million years ago the continents were in collision and the rocks of the former ocean floor were squeezed and heated and transformed into the hard greywacke we see today.

Another consequence of this period of continental collisions was that large volumes of molten rock, or magma, were generated at depth. While some of this magma did reach the surface where it erupted as lava (as for example in parts of Tyrone), here much of it remained underground where it cooled slowly into the hard igneous rock granodiorite. Much of Slieve Croob is made up from granodiorite and geologists have dated the rock to around 400 million years ago.

Southwards, the Mourne Mountains too are made up from an igneous rock that cooled underground from magma - granite. This hard rock crystallized out from a reservoir of magma that existed deep underground here around

56 million years ago. At that time the European and North American continents had begun to spilt apart, eventually leading to the formation of the North Atlantic Ocean. While further north, the magma reached the surface where it was quietly erupted as lava (as at, for example, the Giant's Causeway), in this area the magma never erupted at the surface but cooled underground where it hardened into granite. Millennia of erosion and weathering have now exposed this subterranean magma chamber to the surface, the hard granite now forming the Mourne Mountains.

Over the last 2.5 million years, the Earth's climate has periodically cooled allowing great sheets of ice to accumulate that would extend over much of Ireland. During these Ice Ages, the ice would not only erode deeply into the underlying rock it would also mould the landscape as it advanced over it. The Mournes have many features typical of glacial erosion, including u-shaped valleys that were once filled by glaciers. The small rounded hills that can be seen both south and north from here were, on the other hand, molded by the ice as it advanced. These drumlins are streamlined in shape with their pointed end pointing in the direction of ice flow. Where, as here, the drumlins are grouped together they give the countryside a "basket-of-eggs" appearance when seen from above and it is this grouping that creates the varied landscape of much of area between Counties Down and Longford.







ARCHAEOLOGY

## **SOUTH ARMAGH**

- BALLYMACDERMOTT COURT CAIRN
  - **CLONTYGORA COURT CAIRN**
  - KILNASSAGART PILAR STONE
  - ANNAGHMARE COURT CAIRN
    - BALLYKEEL DOLMEN
    - SLIEVE GULLION CAIRNS
    - **CLONLUM SOUTH CAIRN** 
      - KILLEVY OLD CHURCH
      - KILLEVY OLD CHURCH





CHURCH

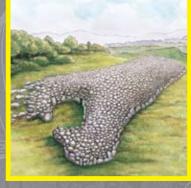
MARE COURT CAIRN//BALLYKEEL DOLMEN//SLIEVE GULLION CAIRNS//

CLONLUM SOUTH CAIRN/KILLEVY OLD CHURCH//KILLEVY OLD

BALLYMACDERMOTT COURT CAIRN//CLONTYGORA COURT CAIRN/

ARCHAEOLOGY

KILNASSAGART PILAR STONE//MOYRY CASTLE//ANNAG//





THE ARCHAEOLOGY OF SOUTH ARMAGH



## Ballymacdermott Court Cairn Baile Mhic Dhiarmada

# SOULLARMAGE

BALLYMACDERMOTT COURT CAIRN 🎟 BAILE MHIC DHIARMADA



## Compal Shliabh gCuillinn Area of Outstanding Natural Bea

## Compal Shliabh gCuillinn



This fine court tomb on the south slope of Ballymacdermot Mountain dates from about 3500BC. It has three separate burial chambers in a gallery which was entered from the forecourt - hence the name.

Téann an tuama cúirte breá seo, atá suite ar mhála theas Shliabh Bhaile Mhic Dhiarmada, ar ais go timpeall 3,500 R.C. Tá trí sheomra adhlactha ar leith in áiléar aige ina ndeachthas isteach ón urlios - sin fáth a ainm.

Funeral rites may have been performed in the forecourt before the bones or ashes of the dead were placed inside. When the site was excavated in 1962 a few fragments of cremated bone, probably human, were found in the two larger chambers. In the gallery, on the right side, you can see projecting stones (corbels) that support the roof.

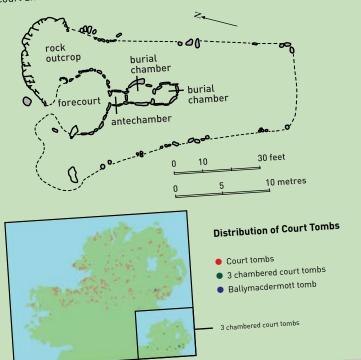
Is dócha go ndearnadh searmanas sochraide san urlios sular cuireadh cnámha nó luaith na marbh laistigh. Nuair a rinneadh tochailt ar an suíomh i 1962 fuarthas smionagar beag de chnámh chréamaithe, cnámh dhaonna is dócha, sna seomraí is mó. San áiléar, ar an taobh clé, is féidir clocha starracha a fheiceáil (coirbéil) a iompraíonn an díon.

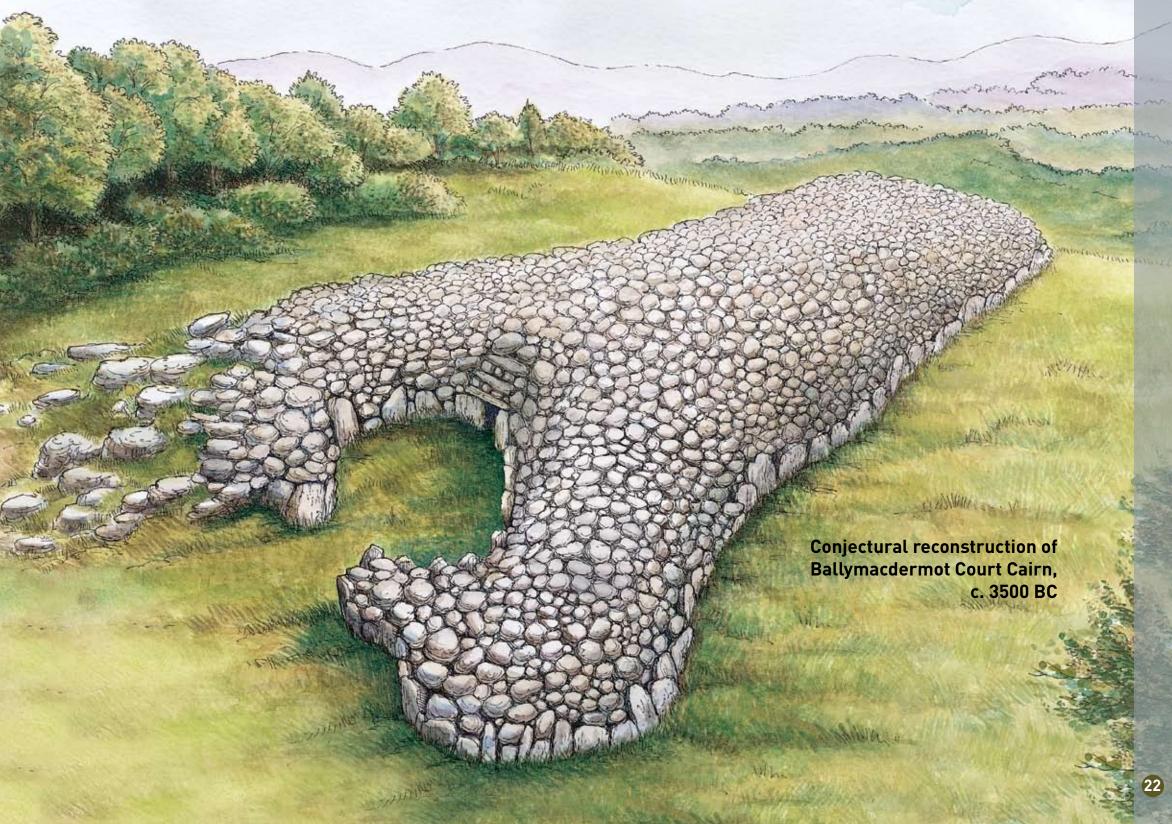
In 1816 John Bell of Killevy Castle reported in The Newry Magazine that he and the local landowner Johnathon Seaver - whose name is perpetuated in Seavers Road just south of here - had opened the tomb and found an urn containing pulverised bone. A thoroughly modern encounter took place in WWII when the tomb withstood an assault by an American tank which accidentally bumped into it during manoeuvres. Despite these happenings, Ballymacdermot remains one of the finest, best preserved court tombs in Armagh.

Sa bhliain 1816 rinne John Bell as Caisleán Chill Shléibhe tuairisc in Iris an Iúir gur oscail seisean agus an tiarna talaimh áitiúil Jonathan 'an Phortaigh' Seaver - a bhfuil a ainm fós ar bhóthar san áit - gur oscail siad an tuama agus go bhfuair siad próca ina raibh púdar cnáimhe. Sa Dara Cogadh Domhanda buaileadh tanc Meirceánach in aghaidh an tuama nuair a bhí sé ar inlíocht. D'ainneoin na n-imeachtaí seo, maireann uaigh Bhaile Mhic Dhiarmada mar cheann de na tuamaí cúirte is fearr in Ard Mhacha.

#### **FACT FILE**

Three-chambered count tombs are not common in Ireland but there are a number of examples in this area. Court tombs have semicircular forecourts but this one is almost circular. The existence of the granite rock on the left side may have influenced the builders to settle for a round court. Neolithic pottery was found in the forecourt and in the chambers.





## Clontygora Court Tomb Chluainte Gabhra



CIONTYGORA COURT TOMB



## Compal Shliabh gCuillinn

Area of Outstanding Natural Beaut

### Clontygora Court Tomb Chluainte Gabhra



Known locally as the 'King's Ring', this court tomb has a prominent position in the southeast part of the rugged Slieve Gullion ring-dyke. It was built for collective burial by an early farming community who cultivated the land as long ago as 3500 BC. Despite damage to the structure it is a most impressive monument and more extensive than it first appears.

Tugtar 'Fáinne an Rí' ar an tuama seo sa cheantar máguaird agus tá suíomh feiceálach aige sa chuid thoir theas de chompal creagach Shliabh gCuillinn. Tógadh le haghaidh cnuasadhlactha é ag pobal feirmeoireachta luath a shaothraigh an talamh chomh fada ó shin le 3,500RC. Cé go ndearnadh damáiste don struchtúr is leacht mórthaibhseach é agus tá sé níos fairsinge ná mar is léir ar an chéad amharc.

An imposing façade of tall stones, some over 2.7 metres tall, defines the deep U-shaped forecourt (hence the name, court tomb) where funeral rites were performed before the ashes or bones of the dead person were taken through the entrance, marked by two massive portal stones, to be placed inside the burial gallery. This forecourt may have been used for other ceremonies as well as for burial ritual. Roof slabs and a large capstone over the first of three chambers are supported on enormous split granite boulders. Court tombs usually face east but this one faces north, towards a stream 100 metres away.

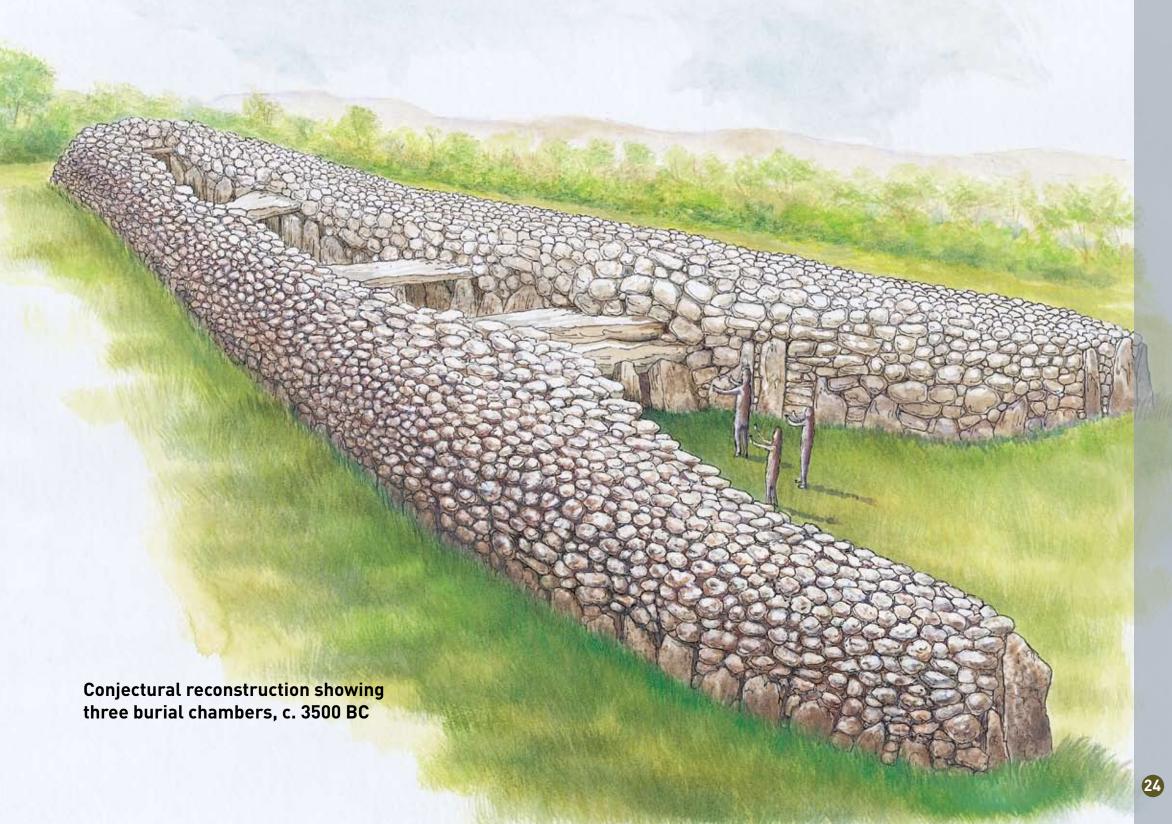
Déanann aghaidh mhaorga de chlocha arda, cuid acu níos nó ná 2.7m in airde, imlíne an urleasa u-chruthaigh dhomhain mar a ndéantaí deasghnátha adhlactha sular tógadh luaith nó cnámha na marbh tríd an bhealach isteach, marcáilte ag dá chloch ursanacha mhóra, le bheith curtha laistigh den áiléar adhlactha. Is dócha go mbaintí úsáid as an urlios seo le haghaidh searmanas eile chomh maith le deasghnátha adhlactha. Iompraíonn mulláin eibhir scoilte ollmhóra leaca dín agus cloch dhín mhór atá os cionn an chéad cheann de thrí sheomra. De ghnáth bíonn tuamaí cúirte ar aghaidh an oirthir ach tá an ceann seo ar aghaidh an tuaiscirt, I dtreo srutháin 100m uaidh.

### **FACT FILE**



An excavation in 1937 showed that the tomb was originally covered by a small elongated cairn flaring out around the forecourt. Finds from the excavation include cremated bone, flint artefacts and pottery.

Stone Axe, Flint arrow heads and Quartz, Clontygora Court Cairn.



## Kilnasaggart Pillar Stone Cill na Sagart

## SOUTHARMAGIA

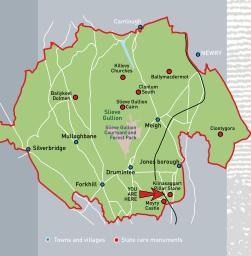
KILNASAGGART PILLAR STONE



## Compal Shliabh gCuillinn

Area of Outstanding Natural Beaut

Kilnasaggart Pillar Stone Cill na Sagart

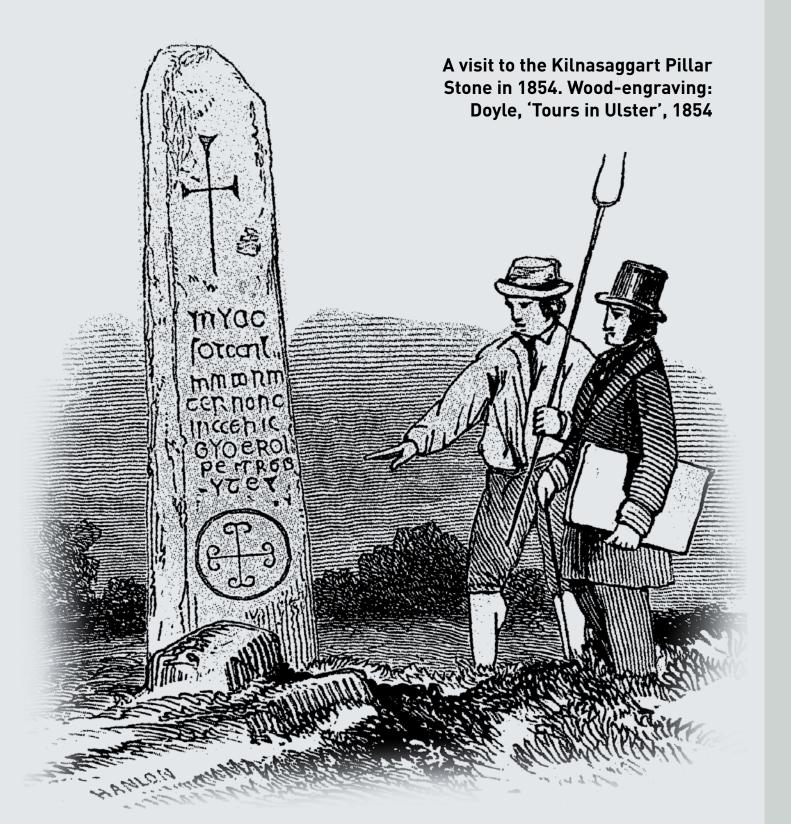


This tall granite pillar, in the Edenappa townland, marks the site of an early cemetery located on one of Ireland's five great roads, the Slighe Midhlachra, which ran from near Drogheda in County Louth through the Moyry Pass into west Down and perhaps as far as **Dunseverick in north Antrim. Standing more** than two metres high, it is believed to be the earliest historically dated inscribed stone in Ireland. A long inscription on the south-east face, between two large crosses, records the dedication of the place by Ternoc, son of Ceran Bic (the little), under the patronage of Peter the Apostle. Ternoc's death is recorded in the annals at 714 or 716 and the pillar can therefore be dated to about AD 700.

Tá an gallán eibhir ard seo suite i mbaile fearainn Éadan an Aba i reilig ársa atá suite ar cheann de phríomhbhóithre na hÉireann - an tslí Míodhluachra - a ritheann ó Dhroichead Átha i gCo. Lú trí Bhealach na Maighre isteach in iarthar an Dúin agus is dócha chomh fada le Dún Sobhairce i dtuaisceart Aontroma. Seasann sé níos mó ná 2m in airde agus creidtear gur seo an chloch inscríofa is luaithe in Éirinn. Tagraíonn inscríbhinn ar an aghaidh thoir theas, suite idir dha chros mhóra, do thiomnú na háite ag Tiarnach, mac Chiaráin Bhig, faoi phatrúnacht an Aspail Peadar. De réir na n-annála, d'éag Tiarnach i 714 nó i 716 agus is féidir an inscríbhinn a dhátáil ó timpeall 700 AT.

On the north-west face are ten carefully carved crosses nine of them within circles and, low down, a number of parallel linear marks, once interpreted as a possible ogham inscription but actually knife-sharpening score marks. Traditionally, a crock of gold was buried below the pillar and it was overturned by treasure-seekers in the 1830s, but it was soon reset. Excavation in the 1960s to the south of the pillar revealed a number of both stone-built and dug graves, probably dating from the Early Christian period. A map of 1609 shows a ruined church in this area, but there are no visible remains and no trace was found during the excavation.

Ar an aghaidh thiar thuaidh tá deich gcros snoite go cúramach le naonúr acu laistigh de chiorcail agus níos ísle tá roinnt marcanna comhthreomhara líneacha agus creideadh gur inscríbhinn oghaim a bhí ann ach is marcanna faobhraithe scine iad. De réir traidisiúin bhí próca óir curtha faoin ghallán agus leagadh é ag tóraithe seod sna 1830í ach cuireadh ar ais I láthair é gan mhoill. Nocht tochailtí ó dheas den ghallán sna 1960í roinnt uaigheanna, idir uaigh chiste agus uaigh thochailte, agus iad ag dul siar is dócha chuig Ré Luath na Críostaíochta. Taispeánann léarscáil ó 1609 eaglais scriosta sa cheantar seo ach níl rian ar bith fágtha agus ní bhfuarthas aon rian i rith na tochailte.





(Inscription reads INLOC/SOTANI/MMARNI/TERNOHC/MACCERAN/BICERCUL/PETERAP/STEL)

### **Moyry Castle**

## Caisleán na Maighre

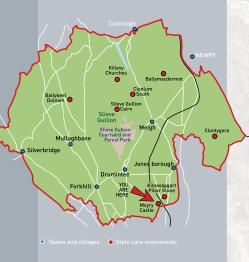


GAP OF THE NORTH



## Shliabh gCuillinn

### Moyry Castle Caisleán na Maighre



This 17th-century campaign fort overlooks the Moyry Pass, the valley known as the 'Gap of the North'. It has always been the main direct north-south route in eastern Ireland. In the days of the Fianna legends the men of Ulster sallied forth through this valley to harry the tribes of Leinster.

Tá an dún 17ú céad seo suite os cionn Bhealach na Maighre ar a dtugtaí 'Bearna Uladh'. Ba é seo i gcónaí an bealach díreach idir an deisceart agus an tuaisceart in oirthear na hÉireann. I bhfinscéalta na Féinne théadh fir Uladh tríd an bhearna seo le hionsaí a dhéanamh ar threibheanna Laighean.

The small square tower has unusual rounded corners and numerous gun-loops, from ground-floor level right up to the wall-walk. It is a very basic castle, with no stairs. The living quarters, with fireplaces and windows, must have been reached by ladders. The wallwalk, complete with its exposed latrine, must also have been accessed by a ladder. The doorway was protected by a gun-loop to one side and by a drophole in the parapet above, allowing missiles to be dropped on to attackers. The stone bawn wall which once surrounded the castle has mostly gone except for one isolated stretch to the south east.

Tá cúinní cruinne neamhghnácha ag an túr cearnach beag chomh maith le poill ghunna iomadúla ón leibhéal talaimh suas go dtí an chosán balla. Is caisleán an-simplí é gan staighre. Caithfidh sé go mbaintí na seomraí cónaithe amach ina raibh fuinneoga agus teallaigh, le dréimirí. Bheadh orthu dréimirí a úsáid fosta chun an cosán balla agus an leithreas amuigh faoin aer a bhaint amach. Rinneadh an doras a chosaint ag poll gunna ar thaobh amháin agus ag poll ionsaithe san uchtbharr thuas, a ligfeadh clocha srl a chaitheamh síos ar ionsaitheoirí. Tá an balla bábhúin cloiche a bhí timpeall ar an chaisleán lá den saol beagnach imithe ach amháin cuid scoite ar an taobh thoir theas.

The castle was built to secure the pass by Lord Mountjoy, Queen Elizabeth's most effective and ruthless general, who was sent to Ulster to crush the power of Hugh O'Neill, Earl of Tyrone. In May and October 1600 Mountjoy's armies advanced north into the pass through bogs, streams and dense woods. On both occasions they returned via Carlingford, the lesser of two evils.

Tógadh an caisleán leis an bhealach a chosaint ag an Tiarna Mountjoy, an ginearál ab éifeachtaí agus ba neamhthrócairí de chuid Bhanríon Eilís a

cuireadh go hUlaidh chun smacht a chur ar chumacht Aodha Uí Néill, Iarla Thír Eoghain. I mí Bealtaine agus i mí Deireadh Fómhair d'fhulaing arm Mountjoy de '3,000 coisí agus 300 eachaí' briseadh mór 'i gceann de na comhraic is mó a chonacthas riamh in Éirinn'. Chúlaigh arm Mountjoy 'go curata agus go h-ordúil' ar an dá ócáid bealach Chairlinn.

In June 1601 they advanced north again, heading for the River Blackwater and Tyrone. This time Mountjoy cleared the Moyry Pass by cutting the woods and built this fort on the rock to secure the pass. The castle was reputedly finished 'within the month' and immediately garrisoned under the command of Captain Anthony Smith.

I mí Meithimh 1601 nuair a bhí an bealach gan chosaint chuaigh siad ó thuaidh arís i dtreo na hAbhann Móire agus Thír Eoghain. An t-am seo ghlan Mountjoy Bealach na Maighre nuair a ghearr sé na coillte agus thóg sé an dún seo ar an charraig chun an bealach a dhaingniú. Deirtear gur tógadh an caisleán 'i gceann míosa' agus cuireadh garastún ann faoi cheannas an Chaptaen Anthony Smith.

### FACT FILE

The Moyry Pass map made by Richard Bartlett 1602-3 (National Library of Ireland). The intrepid Norfolk born cartographer travelled across Ulster with Mountjoy's armies during the O'Neill campaign. Soon after drawing this map, Bartlett met a violent death, and had not time to fill in the title band. 'Our geographers do not forget what entertainment the Irish of Tyrconnell gave to a mapmaker about the end of the late rebellion, wrote the Irish Attorney General in a letter in 1609. When he came into Tyrconnell the inhabitants took off his head because they would not have their country discovered.' After this experience the crown's surveyors in Ulster took care to work only under quard.





### Annaghmare Achadh na Marbh

## SOUTHARMAGIA

THE COURT TOMB AT ANNAGHMARE



## Compal Shliabh gCuillinn Area of Outstanding Natural Beau

### Annaghmare Achadh na Marbh



The court tomb at Annaghmare is one the best preserved examples of its type, with many of its features preserved in situ after they were first revealed during excavation in 1963-64. It stands on a localised rocky outcrop, the lower, once boggy, surroundings now planted with trees. The horseshoe-shaped forecourt stands at the southern end of the tomb and is defined by several large stones, up to 1.9m high, with the spaces between filled with drystone-walling. The most unusual feature of the forecourt, however, is a small standing stone to the south-east of the centre.

Tá an Tuama Cúirte ag Achadh na Marbh ar cheann de na samplaí is fearr dá chineál a mhaireann agus tá cuid mhaith dá ghnéithe le dea-bhail orthu suite mar a bhí said nuair a nochtadh iad i dtochailt 1963-64. Tá sé suite ar chreagán agus tá an talamh timpeall air, a bhí lá den saol ina phortach, anois curtha le crainn. Tá an t-urlios ar dhéanamh crú capaill ag an taobh theas den tuama le himlíne de roinnt cloch mór, suas le 1.9m in airde, agus na spásanna eatarthu líonta le ballaí fuara. Is í an ghné is neamhghnáiche den urlios ná an gallán beag atá suite ar an taobh thoir theas den lárphointe.

The cairn behind, which stands up to 1.8m above the natural ground level, narrows towards the north and is also defined by a mixture of upright stones and drystone walling.

Tá an carn taobh thiar den urlios seo suas le 1.8m in aired os cionn an leibhéil talaimh nádúrtha agus caolaíonn sé ar an taobh ó thuaidh le himlíne de chlocha ina seasamh agus ballaí fuara.

A three-chambered gallery around 7m long, with evidence for its original corbelled roofing preserved in the inner chamber, is entered from the centre of the forecourt.

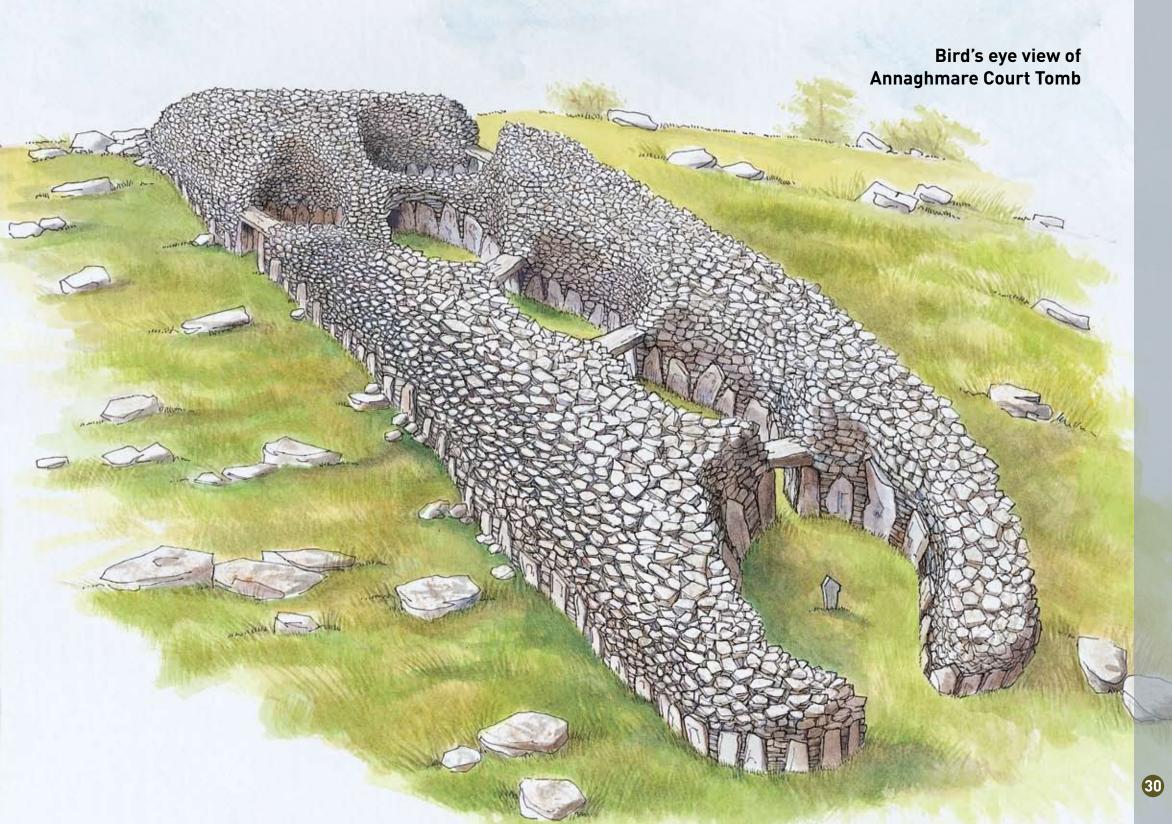
Is féidir dul isteach trí cheartlár an urleasa go háiléar trí sheomra timpeall 7m ar a fhad agus le fianaise den bhundíon coirbéalta a bhí ann lá den saol sa seomra istigh.

Although the outer chamber had been badly disturbed before the excavation, both of the others contained burial deposits, which included at least side chambers, entered through well-matched portal stones which may have been part of the original revetment. Neither chamber contained any finds or evidence that they had been used for burial.

Nocht tochailt ar an taobh thuaidh den charn gur síneadh é thar dhá thaobhsheomra os comhair a chéile le bealaí isteach trí chlocha ursanacha a réitíonn le chéile agus a bhí mar chuid den sraodbhalla bunaidh. Ní raibh fianaise nó fuilleach sna seomraí seo gur úsáideadh le haghaidh adhlactha iad.

#### **FACT FILE**

Court tombs are named after the distinctive semicircular forecourt, which stands at one end of a long stone cairn that originally enclosed the burial chambers. More than 400 examples are known in Ireland, most of the north of a line between Carlingford and Sligo and there are eight examples in County Armagh.



### **Ballykeel**

### **An Baile Caol**



SPECTACULAR NEOLITHIC TOMBS



## Compal Shliabh gCuillinn

### Ballykeel An Baile Cao



Dolmens, also called portal tombs, are the simplest and perhaps the most spectacular of all the Neolithic tombs. The name dolmen is derived from the Breton 'tolmen' - stone table - and in these tombs three or more upright stones support a large capstone, forming a burial chamber underneath. The entrance or portal is between the two uprights and originally the single chamber stood at one end of a cairn, a great mound of stone and earth.

Is iad Dolmainí, nó Tuamaí Ursanacha, na samplaí is simplí agus b'fhéidir is suntasaí de na tuamaí Neoiliteacha go léir. Tagann an t-ainm dolmain ón fhocal Briotáinise 'tolmen' - a chiallaíonn tábla cloiche - agus sna tuamaí seo iompraíonn trí nó níos mó cloch ina seasamh cloch dhín ollmhór agus cruthaíonn sé seo seomra adhlachta faoin dolmain. Tá an doras suite idir an dá chloch ingir agus ar dtús bhí an seomra singil suite ar thaobh amháin de charn ollmhór de chloch agus de chré.

This elegant dolmen, set on the edge of a terrace ringed by low rugged hills, is known locally as the Hag's Chair. It stands dramatically at the southern end of the long stone cairn that stretches back to where you are standing. Most of the cairn has gone, but two parallel lines of carefully-set stones defining the edges are still visible. Excavation in 1963 revealed that a stone-lined grave or cist had been inserted into the northern end of the cairn but this is no longer visible. The entrance to the portal tomb is on the south side, overlooking a tributary stream of the Forkill River. Although the chamber had already been disturbed, finds from the excavation included many sherds of Neolithic pottery and a few flint tools. At the same time the magnificent capstone, which had slipped when the backstone split, was reinstated using a mobile crane. The backstone itself was also repaired using special cement and the displaced stone that once sealed the tomb was pulled back into position across the entrance.

Tá an dolmain seo suite ar bhruach lochtáin le cnoic chreagacha timpeall uirthi agus tugtar 'Cathaoir na Caillí' uirthi sa cheantar máguaird.

Seasann sé go drámata ag taobh theas den charn cloiche fada a shíneann ar ais chuig an áit a bhfuil tú i do sheasamh. Ta mórchuid an chairn imithe ach is féidir dhá líne de chlocha a bhí leagtha síos go cúramach a fheiceáil mar imlíne na gciumhaiseanna. Nocht tochailt i 1963 gur cuireadh uaigh chiste sa taobh thuaidh den charn ach níl sí seo le feiceáil anois. Tá bealach isteach sa dolmain suite ar an taobh theas os cionn craobhabhann d'Abhainn Fhoircil. Cé gur cuireadh an seomra trí chéile cheana féin, i rith na tochailte thángthas ar cuid mhaith smionagair de chré-earraí Neoiliteacha agus roinnt uirlisí cloch thine. Baineadh úsáid as crann meicniúil ag an am seo chun an chloch dhín ollmhór, a shleamhnaigh anuas nuair a scoilt an chúlchloch, a athshuí. Deisíodh an chúlchloch chéanna fosta le suimint speisialta agus tarraingíodh an chloch dhíláithrithe a dhún an tuama lá den saol ar ais san ionad ceart sa bhealach isteach.

Portal Tombs were built in the Neolithic Period, probably in the centuries around 3500 BC. Without their protective cairns and with their stony frames and massive capstones revealed, local people have called them fanciful names and woven tales of fairies, giants and witches around the ancient stones.

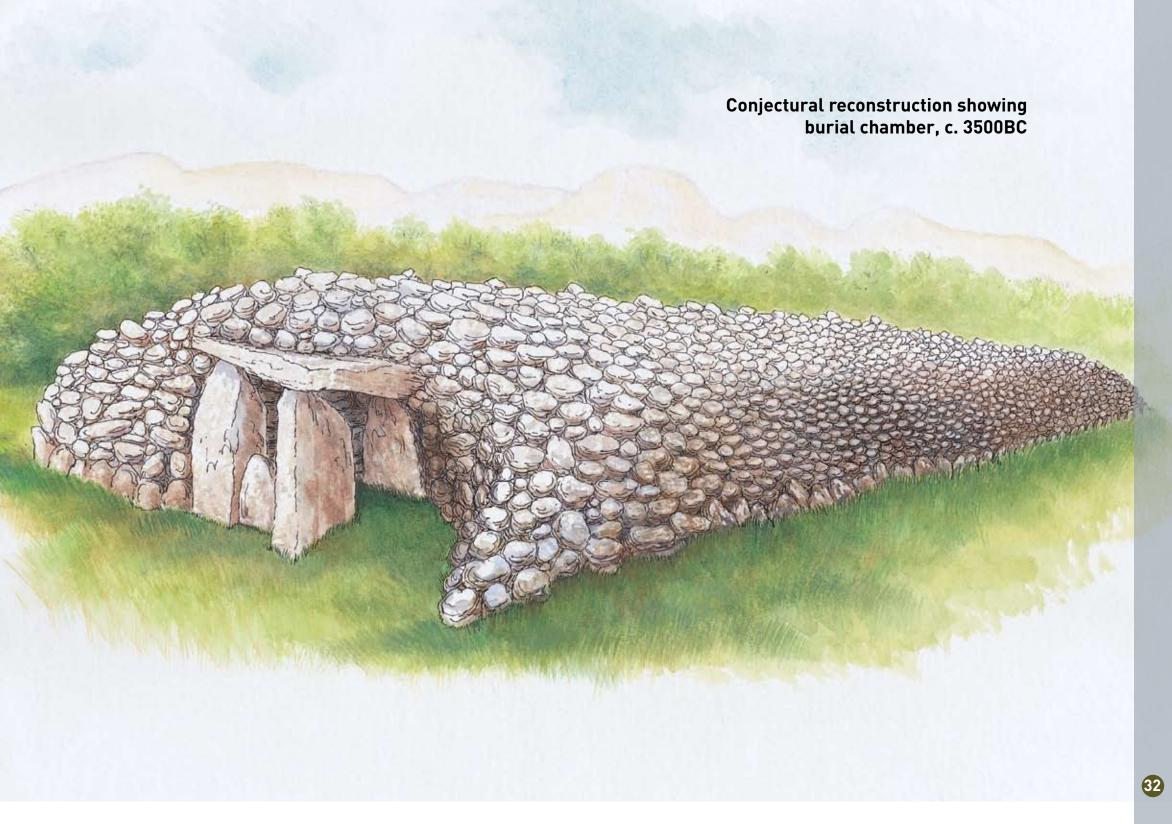
Tógadh Tuamaí Ursanacha sa Tréimhse Neoiliteach, is dócha sna céadta thart fá 3,500 R.C. Agus na cairn chaomhnaitheacha imithe agus na frámaí clochacha agus clocha dín ollmhóra nochta, thug muintir na háite ainmneacha taibhseacha orthu agus chum siad scéalta faoi shióga, fathaigh agus cailleacha a raibh baint acu leis na clocha ársa.

### FACT FILE

There are four other portal tombs in County Armagh, if we include the unusual monument at Clonlum South. Not surprisingly, given the weights involved, all of their massive capstones have fallen or been dislodged. All but one are found in the area around Slieve Gullion, the single exception being the tomb at Aughnagurgan, 6 kmsouth of Keady.



Pottery bowls, Ballykeel Dolmen



## Slieve Gullion Sliabh gCullinn



### Compa Shliabh gCuillinn

### **Slieve Gullion** Sliabh gCullinn



Dramatically situated on the southern end of the Slieve Gullion summit ridge at an altitude of over 570m, this is the highest surviving passage tomb in Ireland with stunning views over the surrounding countryside. It consists of a circular cairn some 30m in diameter and up to 4m high, with a kerb of massive, but undecorated, stones around the perimeter. A slight indentation on the south-west marks the entrance to a short, lintelled, passage which leads to the octagonal, originally corbelled, chamber.

Suite ar cheann theas de mhullach Shliabh gCuillinn in airde thar 520m, is é seo an tuama pasáiste is airde atá ar fáil in Éirinn le radharcanna iontacha ar an cheantar máguaird. Tá carn ciorclach ann atá 30m trasna agus 4m in airde le ciumhais de chlocha ollmhóra gan oirnéaladh timpeall na himlíne. Is é an t-aon chomhartha den bhealach isteach ná bearnáil bheag ar an taobh thiar theas ina bhfuil pasáiste lindéir gairid a leanann chuig an seomra ochtagánach a bhí coirbéalta lá den saol.

The earliest documented investigation of the site dates to 1789, when the chamber was opened by locals searching for the old lady or Cailleach Beara, but only a few human bones were found. Not surprisingly, excavation in 1961 revealed that the chamber had been badly disturbed and the only small finds were a few pieces of worked flint, a single scraper and an arrowhead. Two of the stone basins commonly found in passage tombs were also discovered below modern fill in the chamber and a third (now housed in Armagh County Museum) was recovered from the outer end of the passage.

Téann an fhianaise is luaithe de thochailt an tsuímh siar go 1789 nuair a osclaíodh an seomra ag muintir na háite a bhí ar lorg na Caillí Béara ach ní bhfuarthas ach roinnt cnámh daonna. Ní nach ionadh nuair a rinneadh tochailt i 1961 go bhfuarthas amach go raibh an seomra scriosta agus ní bhfuarthas ach cúpla píosa de chloch thine, scríobán agus rinn saighde. Thángthas ar dhá bháisín cloiche a bhíonn go minic i dtuamaí pasáiste faoi líonadh na haimsire seo sa seomra agus fuarthas ceann eile (atá anois in larsmalann Ard Mhacha) ag an taobh amuigh den phasáiste.

Excavation also revealed that a small cairn of stones, about 12m in diameter, had subsequently been added to the northern side of the tomb. Although no burials or structural features were uncovered by the excavation, it seems reasonable to interpret this as a Bronze Age addition. A small round cairn on the northern end of the summit ridge was also excavated in 1961 revealing two small cist graves and fragments of distinctive Early Bronze Age pottery.

Thaispeáin an tochailt gur cuireadh carn beag de chlocha timpeall 12m trasna ar an taobh theas den tuama níos déanaí. Cé nár thángthas ar adhlacthaí nó ar fhoirgnimh creidtear gur méadú den Chré-Umhaois é seo. Rinneadh tochailt fosta ar charn beag cruinn ar an taobh thuaidh den mhullach i 1961 agus nochtadh dhá uaigh chiste agus smidiríní na Cré-Umhaoise.

Slieve Gullion dominates the landscape of the area and plays a central role in many folk tales. Several link Finn McCool with the mountain, and one wellknown story involves the Cailleach Beara, who entices Finn to swim in the magical lake on the summit of the mountain, only for him to emerge as an old and weak man.

Tá Sliabh gCuillinn go hard os cionn radharc tíre an cheantair agus tá príomhról aige i mbéaloideas. Tá baint ag Fionn Mac Cumhaill leis an sliabh agus de réir fhinscéil amháin mheall an Chailleach Béara é chun snámh sa loch draíochta ar bharr an tsléibhe ach tháinig sé amach ina sheanfhear lag liath.

### **FACT FILE**

Passage tombs are the largest and often most spectacular of the Neolithic tombs in Ireland, in which the burial chamber, usually set within a circular mound, is reached via a passage. Around 230 examples have been recorded in Ireland, most of them in the northern part of the island. Some, such as those at Carrowmore (Co. Sligo) are found in groups or cemeteries and others, including Slieve Gullion, occupy dramatic hilltop locations. The finest and best-known examples are in the Boyne Valley at New Grange, Knowth and Dowth, dated to around 2500BC and incorporating superb examples of the decorated motifs, such as concentric circles and spirals, distinctive to this type of tomb.



## Clonlum Cairn Carn Chluian Lom

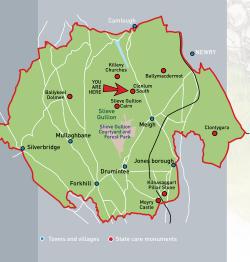
## SOUTHARWAGE

II N II S II A I M F G A I I T H I C M O N II M F N T



## Compal Shliabh gCuillinn Area of Outstanding Natural Real

### Clonlum Cairn Carn Chluian Lom



This unusual megalithic monument is set on the eastern edge of a low ridge, overlooked by Slieve Gullion to the west and around 750m south of the badly disturbed remains of Clonlum court tomb.

Tá an leacht meigiliteach neamhghnách seo suite ar bhruach theas de dhroim íseal le Sliabh gCuillinn os a chomhair ar an taobh thiar agus timpeall 750m theas ó fhuílleach scriosta Thuama Cúirte Chluain Lom.

The site consists of a single, closed, roughly rectangular chamber, defined on north and south by two large side stones which lean inwards to rest on two much smaller end stones. It is set almost centrally within an irregular cairn around 12.5m long, perhaps originally circular but subsequently damaged by cultivation. The chamber was once covered by a massive capstone but this has been displaced and broken in two. A large upright stone stands immediately to the north-west of the northern side stone and projects around 1.2m above the cairn. Originally a matching upright stood on the outside of the southern side stone but this has been pushed over by the weight of the capstone and leans out of position.

Tá seomra singil dúnta beagnach dronuilleach sa suíomh le dhá chloch mhóra ar an taobh theas agus thuaidh, a leanann isteach agus iad leagtha ar dhá chloch deiridh níos lú. Tá sé suite beagnach i gceartlár charn neamhrialta timpeall 12.5m ar a fhad a bhí ciorclach lá den saol is dócha ach rinneadh damáiste air ag curaíocht. Bhí cloch dhín ollmhór os cionn an chairn lá den saol ach cuireadh as láthair seo agus rinneadh dhá leath de. Ta cloch ingir mhór ina seasamh go díreach ar an taobh thiar thuaidh den taobhchloch thuaidh agus gobann sí 1.2m os cionn an chairn. Ar dtús, bhí ingear eile ina sheasamh taobh amuigh den taobhchloch theas ach brúdh ar leataobh é seo ag an chloch dhín agus luíonn sé as láthair.

The chamber was excavated in 1934 but had already been badly disturbed and the only finds were two small sherds of prehistoric pottery, one bearing square-toothed comb impressions, and a polished stone bead.

Rinneadh tochailt ar an suíomh i 1934 ach bhí sé curtha trína chéile cheana féin agus ní bhfuarthas ach smionagar dechré-earraí réamhstairiúla, ceann acu le rianta de choir leathanfhiaclach, agus coirnín cloiche snasta.

This is a difficult monument to classify. It has been interpreted as a portal tomb, with the flanking uprights representing the portal stones defining the entrance, but these usually stand at one end of the cairn and within the side stones of the chamber rather than outside. The closed rectangular chamber set within a relatively small cairn looks more like some form of megalithic cist, but what then is the function of the uprights flanking the western side of the chamber? A third alternative, suggested by the excavators in 1934, is that the monument represents a transition between the more complex tombs of the Neolithic period and the simpler, small scale, cists of the Bronze Age. Under this interpretation the flanking stone echo a court type feature but enclosed within the body of the cairn rather than forming an entrance. The rectangular chamber itself then represents an early form of cist grave, but built of large stones and set above ground in contrast to the below ground, box-like monuments so typical of the Early Bronze Age.

Tá sé doiligh an leacht seo a rangú. De réir teoirice amháin is tuama ursanach é, leis na clocha ingir taobh leis mar chlocha ursanacha ag an bhealach isteach ach de ghnáth bíonn na clocha seo ina seasamh ag ceann amháin den charn agus laistigh de thaobhchlocha an tseomra agus chan lasmuigh de. Tá an seomra dronuilleach dúnta atá suite laistigh de charn measartha beag níos cosúla le ciste meigiliteach de chineál éigin, ach cén ról a bhí ag na clocha ingir ar an taobh iartharach den seomra? Mhol na tochaltóirí i 1934 teoiric eile, go léiríonn an leacht aistriú idir na tuamaí ní ba chasta den tréimhse Neoiliteach agus cistí de mhionchóir shimplí na Cré-Umhaoise. Dé réir na teoirice seo chuirfeadh na taobhclocha gné na huaighe cúirte i gcuimhne ach in áit a bheith mar bhealach isteach tá siad laistigh den charn. Is sampla de chineál luath den uaigh chiste an seomra dronuilleach é féin ach tá sé tógtha le cloche móra agus tá sé os cionn an talaimh i gcomparáid leis na leachtaí ciste faoi thalamh a bhí coitianta sa Cré-Umhaois Luath.



### **Killevy Churches** Cill Shléibhe





### Compa Shliabh gCuillinn

### Killevy Churches Cill Shléibhe



The important early convent of Killevy was founded towards the end of the 5th century by St Moninna, also known as Darerca or Bline. It remained a house of nuns for almost 1000 years - one of only four women's foundations in Ireland to survive as major convents. In 923 the place was plundered by Vikings from Carlingford Lough and in 1146 people were killed by a great wind that caused damage all over the north. In the Middle Ages Killevy was a convent of Augustinian nuns which was dissolved in 1542 when the last abbess was

Alicia O'Hanlon. Bunaíodh clochar tábhachtach luath Chill Shléibhe roimh dheireadh an 5ú céad ag Naomh Moninne a dtugtaí Darerca nó Blinne uirthi fosta. Mhair sé mar chlochar le míle bliain - ceann de cheithre chlochar a mhair mar phríomhchlochair. Creachadh i 923 é ag Lochlannaigh ó Loch Cairlinn agus sa bhliain 1146 maraíodh daoine ag stolladh gaoithe a rinne damáiste ar fud an tuaiscirt. Sa Mheán-Aois ba chlochar Agaistíneach é agus lánscoireadh é i 1542 nuair a bhí Ailís Ní Anluain ina máthairab dheireanach.

The very long narrow 'church' you see is in fact two churches which have been joined together. The west church is the only surviving pre-Norman church in County Armagh and its massive lintelled door dates from the 10th century.

Is dhá eaglais i ndáiríre í an 'eaglais' chúng an-fhada atá le feiceáil, mar cuireadh an dá eaglais le chéile. Is é an eaglais iartharach an t-aon eaglais réamh-Normannach a mhaireann i gContae Ard Mhacha agus is ón 10ú céad an doras lindéir ollmhór (is féidir níos mó a léamh faoi taobh istigh).

A pictorial map of 1609 shows that Killevy once had a round tower. It was blown down in a gale in about 1768 and Labhrás Ó Ceallach, Captain Redmond O'Hanlon's harper, wrote a lament for it:

O steeple of Killevy My grief to have thee down If the two Redmonds were living. Thy top would not be broken.

Taispeánann léarscáil phictiúrtha ó 1609 go raibh cloigtheach ag Cill Shléibhe lá den saol. Leag gaoth mhór é timpeall 1768 agus scríobh cláirseoir an Chaptaen Réamainn Uí Anluain, Labhras Ó Ceallaigh, scríobh sé marbhna dó:

A Chloigthigh Chill Shléibhe Mo bhrón tú bheith thíos Dá mbeadh an dá Réamonn beo Ní bheadh do bharr briste.

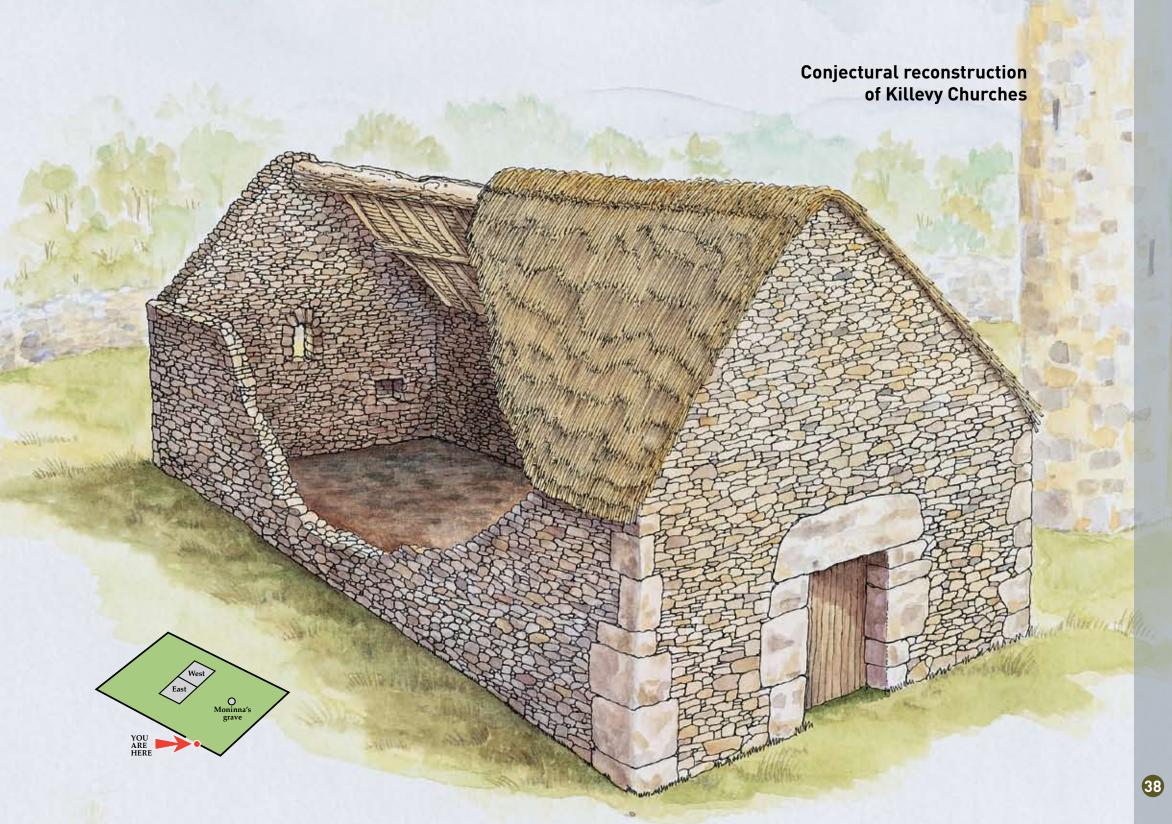
Armagh was the country of the O'Hanlon lords of Orior, until they were displaced. 'Count' Redmond O'Hanlon was a famous outlaw slain at Hilltown in 1681.

Bhí muintir Uí Anluain ina dtaoisigh ar dhúiche Oirthir, cuid de Chontae Ard Mhacha, go dtí gur cuireadh as láthair iad. Ba thóraí clúiteach é an 'Cúnta' Réamann Ó hAnluain ach maraíodh é i mBaile Hill i 1681.

### **FACT FILE**

Several stories describing a miracle at Killevy during the time of the fourth abbess, Derlaisre. She was building a wooden church here but it was proving impossible to carry a long timber for the roof-ridge down from the mountain. Miraculously, the day after prayers asking for Monnine's help, the timber was found near the convent, ready for use. A later account, written between 1050 and 1100, adds that the building has been restored and the ridge-piece is preserved as a relic. Taken together the two accounts provide good evidence for a wooden church, restored or rebuilt in the 11th century.

Killevy was also the scene of an important meeting in November 1477, when Edmund Cunisburgh, the royal candidate for the primacy of Armagh, met the papal nuncio Octavian. They met first in the church and then retired to the residence of the abbess, where Cunisburgh resigned.



## Killevy Churches Cill Shléibhe

## SOUTHARMAGE

MONASTIC LIFE AT KILLEVY



## Compal Shliabh gCuillinn

Killevy Churches Cill Shléibhe



Monastic life continued at Killevy into the Middle Ages, with the foundation of an Augustinian convent, probably in the late 12th century. There are frequent references in medieval documents, several of them reflecting increasing tensions between church and lay power. For example, Papal records show that the rectory was disputed in 1535 between Susanna MacNamee 'calling herself a nun of the order of St Augustine' and Felim O'Neill. The end of the convent came in 1542 when the last abbess, Alicia O'Hanlon, withdrew with her companions and the site and endowments were granted to Sir Marmaduke Whitechurch.

Lean an saol manachúil ar aghaidh ag Cill Shléibhe go dtí an Mheánaois, nuair a bhunaíodh clochar Agaistíneach, go mall sa 12ú aois is dócha. Déantar tagairt dó go minic i gcaipéisí meánaoiseacha, cuid acu a thaispeánann an t-achrann a bhí ag méadú idir cumhacht na heaglaise agus an chumhacht thuata. Mar shampla, taispeánann cuntais pápacha go raibh argóint ann maidir leis an teach reachtaire i 1535 idir Susanna Nic Con Midhe 'agus bean rialta de chuid oird Naomh Agaistín á tabhairt uirthi féin' agus Féilim Ó Néill. Cuireadh deireadh leis an chlochar i 1542 nuair a d'fhág an mháthairab dheireanach Ailís Ní Anluain an áit lena mná cuideachta agus bronnadh an suíomh agus na maoinis ar Marmaduke Whitchurch.

The east church is medieval, probably 15th century, and it was here that Edmund Connisburgh, royal nominee for the primacy, met the papal nuncio, Octavian, in November 1477.

Is eaglais mheánaoiseach an eaglais oirthearach, den 15ú aois is dócha, agus b'anseo a bhuail Edmond Connisburgh, ainmnitheach ríoga don phríomhaíocht, le Nuinteas an Phápa, Octavian, i mí na Samhna 1477.

The most notable architectural feature is the steeply-pitched east gable, complete with fine coping stones and large window opening. Although many of the cut stones have been removed, if you look closely you can see the small bar holes in the jambs, the fact that they are mismatched showing that the window was once divided by a central mullion. There are also carved heads, both crowned, either side of the window on the outside.

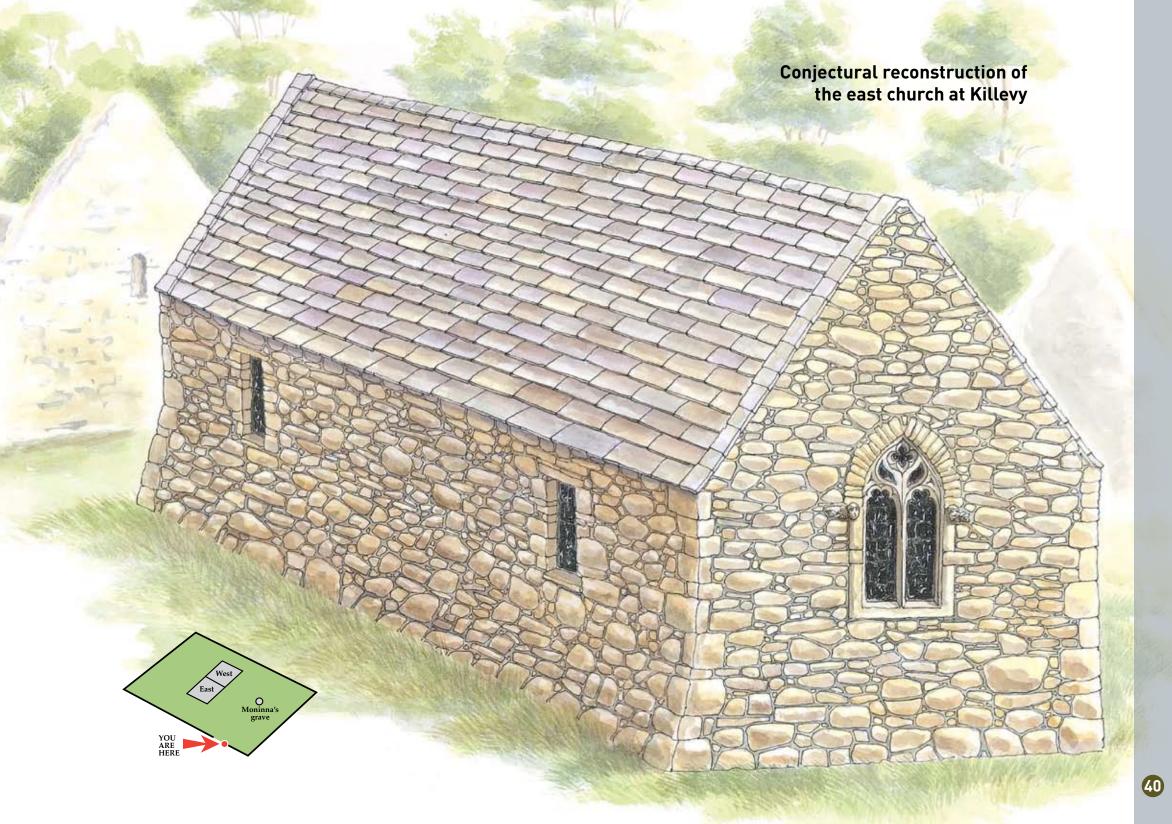
Is í an ghné ailtireachta is suntasaí ná an bhinn oirthearach le crochadh géar chomh maith lena clocha cóipeála breatha agus an fhuinneog mhór. Cé go bhfuil cuid mhaith de na clocha gearrtha bainte amach, má amharcann tú go géar is féidir leat na poill barra beaga a fheiceáil sna gialla agus ós rud é nach oireann siad le chéile is léir gur roinneadh an fhuinneog lá den saol ag muillean lárnach. Tá dhá cheann snoíte ann fosta, an bheirt acu le coróin, agus iad ar an dá thaobh den fhuinneog ar an taobh amuigh.

The south wall contains the remains of two rectangular window openings and a small wall cupboard, probably used to hold sacred vessels during worship. There are no windows in the north wall, but towards the east end is a curious lintelled doorway, perhaps intended to echo the west door in the adjacent earlier church but clumsy and unskilled by comparison. It may have led out to domestic buildings, including the house of the abbess where Cunisburgh resigned in 1477, but no trace survives and the area is covered by burials.

Sa bhalla theas tá fuílleach dhá fhuinneoige agus tá cófra bhalla beag ann, as a mbaineadh úsáid chun soithí eaglaise a choinneáil. Níl fuinneoga ar bith sa bhalla thuaidh, ach i dtreo an chinn oirthearaigh tá doras lindéir aisteach ar nós an dorais iartharaigh sa tseaneaglais in aice leis ach tá sé de stíl ciotach neamhoilte i gcomparáid leis. B'fhéidir go ndeachaigh an bealach seo chuig foirgnimh tí agus go teach na Banaba, áit a d'éirigh Connisburgh as a phost i 1477, ach níl rian ar bith le fáil orthu anois agus tá an suíomh clúdaithe le h-uaigheanna.

Several cut and worked stones can be identified in the space between the two churches, including a large granite slab with a cross in low relief, probably originally used as a grave marker or cover and possibly dating from the 12th or 13th centuries.

Is féidir roinnt clocha gearrtha agus saoirseachta a fheiceáil sa spás idir an dá eaglais agus leac mhór eibhir le crois i rilíf íseal uirthi agus is dócha gur mbaineadh úsáid aisti mar chomhartha uaighe ar tús agus seans, b'fhéidir, go bhfuil sí ann ón 12ú nó 13ú aois.





ARCHAEOLOGY

DARKLEY

TYNAN



### Ballymoyer Old Church

## NORILAR WAGE

KEEPER OF THE BOOK OF ARMAGH



Compal
Shliabh gCuillinn

Ballymoyer Old Church

BALLYMOYER IS DERIVED from the maor or keeper of the Book of Armagh, with the safekeeping entrusted to the MacMoyer family from at least 1367 when the name appears in the Archbishop's register. The family held a considerable amount of land in the area and a 1609 inquisition records that they held eight townlands, 'time out of mind', from the archbishop.

It is unclear when this site in Ballintemple (church town) was first used, but there was certainly a church here in the 16th century, when Ballymoyer or the Eight-mile Church was a prominent landmark on the route between Newry and Monaghan. It was here that Henry Bagenal encamped on his march to relieve Monaghan in May 1595 and a map of south-east Ulster, probably by Richard Bartlett and dated 1602, shows a roofed church, labelled Balle ne Moyerie the 8-myle churche'.

The present ruined church was traditionally begun in the reign of Charles I (1625-1649), but then abandoned and at least one source claims that it was not roofed until 1775. If so it was used for a remarkably short time, because its successor, the adjacent St Luke's was consecrated in 1822. It is presumably the incomplete walls of the 17th-century church that are recorded in the 1703 survey of the archbishop's lands, under Ballintemple on this townland formerly stood the parish church of which nothing now remains but the old walls within which at the eastern end there grows a large ash tree'.

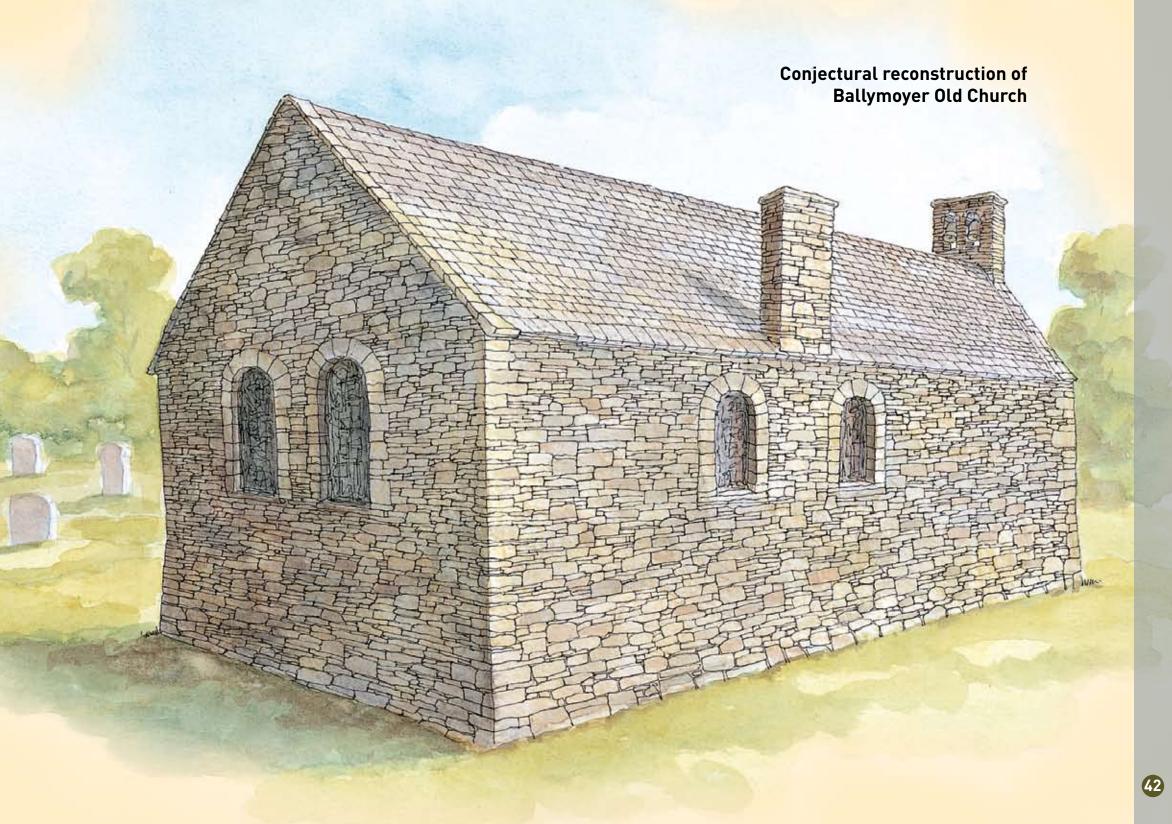
The ruin stands within a densely used graveyard, with several inscribed headstones dating from the early 18th century, but many other uninsribed upright stones which could be much earlier.

The church itself is an unusual survival of 17th-century architecture. It is a simple rectangle, entered via a door in the west gable, which is crowned by a partially ruined double bellcote. The eastern gable is pierced by a pair of round-headed windows, grooved for glass, and there are two similar windows in both the north and south walls. Perhaps the most unexpected feature, however, is the large ruined fireplace, set between the windows in the north wall.

#### **FACT FILE**

The Book of Armagh or Canóin Phádraig is dated to 807 and contains several biographies of St Patrick as well as his Confession. Although it was written several hundred years after his death, it remains one of the most important sources on Patrick and his life. The MacMoyer family was the hereditary keepers of this precious book until 1680, when the Franciscan monk, Florence MacMoyer, pawned it for £5. Florence used the money to finance his journey to London with his cousin John to give evidence against Oliver Plunkett, Archbishop of Armagh. He died in 1713 and is buried at Ballymoyer. The book was subsequently acquired by the Brownlow family and then bought by the eminent antiquarian Bishop Reeves on behalf of Archbishop Beresford, who presented it to Trinity College, Dublin.





### **Darkley**

## NORILARMACI

THE VILLAGE'S INDUSTRIAL ORIGIN



Shliabh gCuillinn

Area of Outstanding Natural Beaut

Darkley

This tall, tapering, chimney, towering over the main street of Darkley and the valley below, is the most dramatic reminder of the village's industrial origins and the crucial role of the textile industry in the history of this part of the Callan valley. Close inspection reveals the quality of the brickwork, reinforced with iron straps, and the small fireplace in the base, as well as an adjacent mill-dam and feeder channel or layd.

The first Ordnance Survey map of the area, published in 1834, shows over 20 textile mills on the Callan between Darkley and Tassagh, including Henry McClean's spinning mill and William Kirk's beetling mill on the future site of the village. McClean died in 1845 and his interests at Darkley passed to William Kirk, who had married Ann McClean in 1820.

Like so many of his contemporaries, Kirk proved to be a successful entrepreneur who soon set about expanding his business. He helped pioneer the use of much more powerful water-driven turbines and fitted one of Ireland's largest water wheels, 70ft in diameter, at Darkley around 1850.

Kirk aimed to house his mill workers on site and so, as the business expanded, so did the village. Workers were attracted by reduced rents and a range of facilities including a co-operative shop, a dairy and a school managed by William Kirk himself, with evening classes for adults.

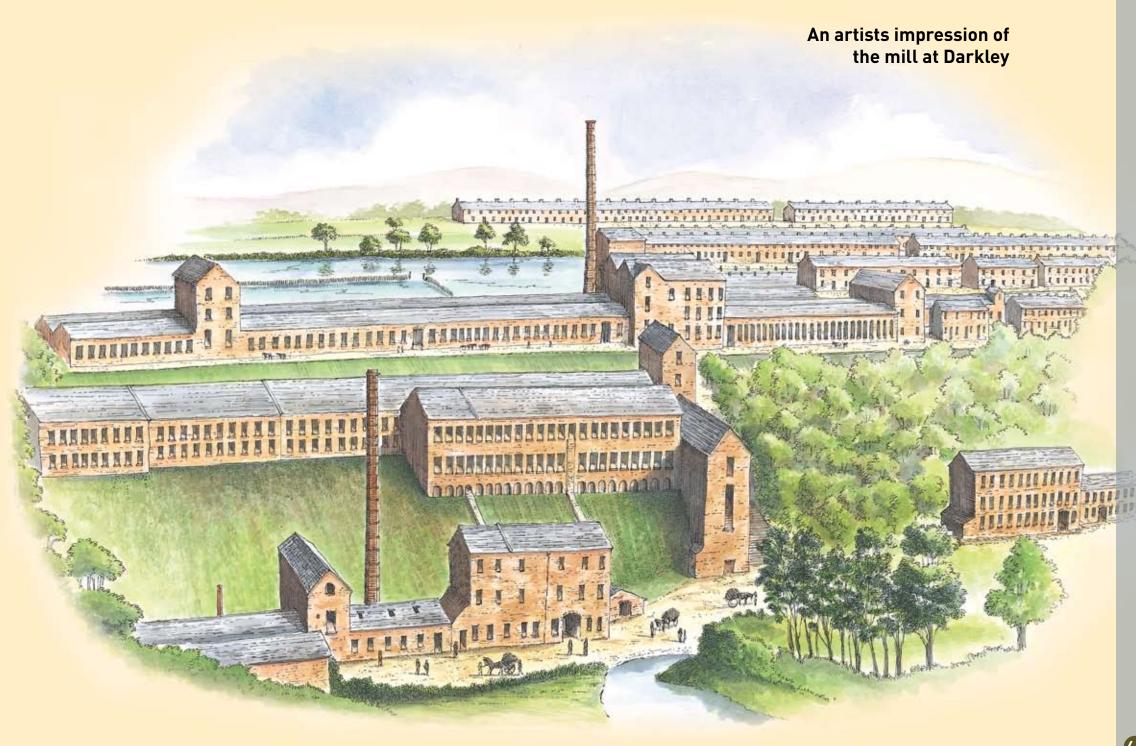
Bassett's 1888 Directory notes that the mill was being used for flax spinning and linen weaving, with 8,000 spindles and 200 power looms and a workforce of around 700. An accompanying illustration on a company

advertisement shows the mill complex and the surrounding village, as well as a second factory at nearby Annvale and the company's imposing warehouse at 11 Donegall Square West in Belfast. The works at Darkley had an impact far beyond the local area. Bassett lists agency outlets in London, Manchester, Paris and New York and the 1901 census lists employees from Wicklow and Wexford, as well as England and Scotland. By then, however, the linen industry was already in decline, and although there were temporary booms during both world wars, the factory eventually ceased production in 1959.

#### **FACT FILE**

The Kirk Memorial William Kirk was born in Larne in 1795 and served as a Member of Parliament from 1852-59 and again from 1868 until his death in 1871. Soon afterwards a memorial was 'erected by many friends in remembrance of William Kirk MP', opposite the old market house in Keady. The inscription continues 'for 40 years he was the mainspring of the industrial activity and social progress of this town and district.' William's extensive business interests were inherited, first by his eldest son John and when he died in 1873 they passed to a second son, William M Kirk. When William M died in 1884 the linenweaving factory at Darkley passed to his trustees.





### **Tynan Cross**

PARTS OF AT LEAST FOUR HIGH CROSSES



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**Tynan Cross** 

Tynan was the site of an important Early Christian church or monastery, traditionally founded by Saint Vindic, whose festival day was August 29. Very little more is known about the early history of the site, which was probably centred on the hilltop occupied by the present Church of Ireland. Tynan is listed as a parish in the 1306 papal taxation, suggesting that the early monastery was succeeded by a medieval parish church. Despite its obscure early history, there is plenty of evidence to show both early activity and craftsmanship here, including parts of at least four high crosses.

Most obvious and striking is the Village Cross, actually made of parts of at least two and possibly three crosses, with the head and upper shaft of one set on the lower shaft and perhaps base of a second. It has been moved at least twice within the village and repaired, possibly at the same time as the first documented move in the 1840s.

The lower shaft is decorated with rectangular panels on all four faces. Best preserved is the eastern panel depicting the fall, with Adam and Eve standing below a tree, complete with serpent coiled around the trunk. The western panel shows a central full length figure surrounded by other figures or heads, but interpretation is uncertain. Possibilities include the second coming, the last judgement and David, king of Israel. The panel on the north has double strand interlace, and both the north and south sides of the upper shaft have decorated rectangular panels.

The imposing cross-head is much repaired and the top member, one of the arms and three of the ring-segments are replacements. It is of openring form and is decorated with striking circular bosses, which project far beyond the rest of the face. A second cross base and a decorated fragment from the ring of a cross head have been built into the churchyard wall nearby. There is also a fragment of decorative moulding which may have come from the medieval parish church. The strange hollowed stone set on the adjacent gatepost is an unusual kind of 17th-century sundial and a similar example can be seen in Monaghan town. An 1884 drawing shows that it was once set on top of the Village Cross.

Tynan Abbey demesne (private) contains three more high crosses. The Terrace Cross was moved from the village, apparently some time after 1835, and the Island and Well crosses were brought from Glenarb, around 1.5km to the north-west, a little earlier.

### FACT FILE

Around 270 free-standing crosses have been identified throughout Ireland. They may have served a variety of purposes, including marking burials, the site of famous events or boundaries and they must also have been a focus for worship and teaching.

The Tynan crosses belong to a small group of crosses centred on the Blackwater Valley, including Eglish and Glenarb, but none of the examples from County Armagh are complete.

The centre of inspiration was probably the ecclesiastical centre at Armagh, where a broken cross with these features survives to broken cross with these features actively to the probability of Ireland cathedral.

the west of the Church of Ireland cathedral.

Dating is difficult, but the 10th to 12th century is likely, possibly under the patronage of important clerics such as Mael Brigte mac





### **Armagh Friary**

## NORTHARWACI.

ARMAGH FRIARY WAS FOUNDED IN 1263



Shliabh gCuillinn

Area of Uutstanding Natural Beauty

**Armagh Friary** 

Armagh friary was founded in 1263-4 by the former Dominican friar and recently appointed Archbishop of Armagh Patrick Ó Scannail, who also began rebuilding the Cathedral on the hill to the north-east. Work seems to have progressed quickly and within 3-5 years the friary cemetery was consecrated and the buildings enclosed within 'a broad and deep trench', perhaps reflecting the location just outside the medieval city.

Little is known of the friary's history, but it does appear to have had powerful patrons. Gormlaith O'Donnell, widow of Domhnall O'Neill, was buried here in 1353 'and there was not in her time a woman of greater fame and renown'. Continued association with the O'Neills may also explain why the buildings were attacked in 1443 by the Lord Deputy and the O'Donnells, despite the presence of their esteemed ancestor.

The friary was suppressed soon after the Dissolution in 1542, but violence continued to haunt the site, with periodic occupation by Crown forces inevitably leading to attack by the O'Neills. It was burnt in 1561 and 1595 and was the scene of a famous incident the next year when Hugh O'Neill's son, Conn, ambushed a force bringing provisions to the beleaguered garrison, which surrendered the city soon afterwards. Dramatic evidence from this period was uncovered during excavation in 1970 when three lead pistol balls, two of which had been fired, were found within the church ruins.

The building that survives is the 13th-century friary church, which at almost 50m is the longest known in Ireland. Best preserved is the west end with its central doorway and evidence for a large window above, as well as numerous putlog holes which would originally have held scaffolding poles. Two pointed arches (there were originally four) to the right open into the missing south aisle and if you look closely you can see that one of the moulded bases has been cut from an earlier stone.

Four rubble bases mid-way along the ruin, at the junction of the nave and chancel, mark the site of a tower which was added in the 15th century. East of the tower was the chancel, reserved for the friars and originally lit by a large window in the east wall. Two tomb recesses are visible in the surviving fragment of the north wall in a position usually reserved for the founder or a wealthy patron and there are also three stone-built graves along the south wall.

The cloister lay north of the church but little evidence survives. Close inspection shows the scar of the west range of the cloister at the west end of the north wall with one side of a doorway nearby. If you walk east along the outside of the wall you can also see the line of the lean-to roof of the cloister walk and a second doorway opening from the cloister.

### FACT FILE

The Franciscans, also known as Grey Friars or Friars Minor, followed the rule of Francis of Assisi and were a mendicant order, vowed to poverty and with close links to the lay community through preaching, teaching and social service.



They arrived in Ireland around 1231 and established communities in or near the main towns over the next few decades. Armagh was the nineteenth foundation, with earlier houses in the north at Downpatrick and Carrickfergus.

Photo: The Cathedral at Assisi



## The North Meridian Marks

KNOWN LOCALLY AS 'THE IN'



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The North Meridian Marks Known locally as 'the in' because of their silhouette as seen from the Grange, the North Meridian Marks were used to check the alignment of the astronomical instruments at the Armagh Observatory. Unfortunately, the view from the Observatory to the marks is now obscured by a clump of trees.

The stone arch with two pinnacles is the earlier, erected around 1790 to provide a stable reference point on the horizon for the instruments, in particular the transit telescope. The telescope was aligned first with the elliptical holes, then the prominent pinnacles and finally a small pierced copper disk. Notes, probably by the Observatory's first astronomer Dr Hamilton, record the exact spot where it should be positioned: 2387 yards due north of the dome. It is a most unusual and interesting monument, evidence in stone of a vigorous spirit of free rational enquiry in late 18th-century Ulster. The architect who built the Observatory, Francis Johnston, probably designed the arch too. The 1835 6-inch map shows a second mark, labelled 'the equatorial', around 40 metres to the south-west, but it was subsequently removed and there are no visible remains.

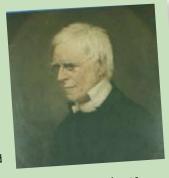
The cast iron obelisk was erected in 1864. It is over 18 feet high and was cast locally, at Gardner's foundry in Armagh. An adjustable pointer in the apex, visible from the observatory, was used to make fine adjustments to a meridian circle, an instrument that measured stellar coordinates.

Another marker, the South Meridian Mark, stands in a field at Ballyheridan, 3234 yards due south of the Observatory. Also probably the work of Francis Johnston, it is a square neoclassical column topped with an iron ring sight. It is not in State Care but can be seen from the pavement on the B31.

Meridian Marks are rare in Ireland and uncommon in Europe and those at Armagh form a unique collection. The North Markers came into State Care in 1983. Given the poor observing conditions that prevail in Ireland, it is remarkable to find such fine examples of these fascinating historic monuments under our cloudy skies.

#### **FACT FILE**

The tedious work of measuring the positions of stars occupied astronomers at Armagh Observatory for most of the nineteenth century. The computations required to correct measurements for small errors were extremely laborious in those days of hand calculation. Nevertheless, Thomas Romney Robinson compiled the first Armagh Catalogue of stars which was published in 1859. This established the position of Armagh Observatory



the position of Armagn Upservatory as a scientific institution of national and international importance. The stellar positions recorded in this book were ultimately combined with those from other observatories around the world to form a fundamental catalogue of stars which defines the reference frame of the Universe against which the movements of the planets are measured.

### **Blackwater Forts**

THE TITANIC STRUGGLE



## Shliabh gCuillinn

**Blackwater Forts** 

It is hard to imagine today, but for the last three decades of the reign of Elizabeth I this part of the Blackwater Valley was at the centre of the titanic struggle between successive O'Neills and the Crown.

Control of the Blackwater and its fords was vital to both sides. To the O'Neills, the river was both a physical and symbolic barrier protecting their heartlands in what is now Co Tyrone. To the Crown, control of the crossings would help protect the lands to the east and south and provide secure bridgeheads from which to attack the O'Neill powerbase.

The area around Blackwatertown, in particular, became the focus for the conflict after the Earl of Essex built a fortified bridge and entrenched enclosure on the Armagh side of the river in 1575. Work seems to have progressed slowly and four months later the Lord Deputy found the fort imperfect and the 'bridge and gate not half reared'. Eventually the fort consisted of a large earthwork and ditch enclosing a number of houses, with many others stretching out along the road to Armagh. The approach to the bridge was apparently protected by a substantial wooden tower, with an equally impressive stone tower forming a bridgehead on the Tyrone side of the river.

Theoretically garrisoned by a constable, porter and 24 footmen the fort does not appear to have been maintained or resourced effectively, however, and it was surrendered within a few hours, after a surprise attack by Hugh O'Neill's half-brother Art, in February 1595.

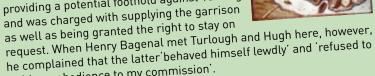
Hugh demolished this first fort and built a small earthwork on the Tyrone side to cover the river crossing, but this was taken in turn by Lord Burgh, who personally led a column across the river, in July1597. A new earthwork was built within a few weeks and garrisoned with 150 men under the experienced Captain Thomas Williams. Crucially, however, the garrison at Armagh was withdrawn, leaving the fort as an isolated foothold, vulnerable to attack and dependent on periodic supply columns via Newry.

Many argued that the Blackwater fort or Portmore was a liability and should be evacuated, but against all odds the garrison held out until after O'Neill's decisive victory at the Yellow Ford (see over) when they were allowed to withdraw.

Once again O'Neill built a series of banks and ditches to defend the crossings, but they proved no match for the determined and ruthless Lord Mountjoy, who fought his way across in July 1601. The old fort was taken by the indomitable Thomas Williams, only to be abandoned in favour of the new or Mullin fort, which Mountjoy built a short distance upstream. Like its predecessors this was an earthwork with ditch and timber defences – in this case with three bastions and a number of English style houses within the interior. Despite his recently broken leg Williams was placed in charge, but the new fort saw little or no action. Within a few months Mountjoy had routed O'Neill and his allies at Kinsale and when he returned north in 1602 a new base was established at Charlemont with much easier access to Dungannon and beyond.

#### **FACT FILE**

The first Blackwater Fort was also an important meeting point, reflecting its position as a Crown base on the edge of the O'Neill heartland. Turlough Luineach, successor to Shane, was summoned to the fort by Lord Deputy Drury in 1579 and had to be carried the 40 miles from Strabane on a litter, having been wounded accidentally by his jester. Perhaps understandably, he was reported to have been drunk during most of his stay. Hugh O'Neill initially saw the fort as providing a potential foothold against Turlough and was charged with supplying the garrison as well as being granted the right to stay on



yield any obedience to my commission.

Map by Richard Bartlett (courtesy of the National Library of Ireland)



### **Battle of the Yellow Ford**

## NORTHARMAGE

THE TITANIC STRUGGLE



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Battle of the Yellow Ford

In early august 1598 Henry Bagenal, Marshal of the Queen's army in Ireland, led a force of over 4000 men north to relieve the beleaguered garrison of the 'new' Blackwater Fort (see previous page). The decision to send a force north had not been taken easily, many favoured abandoning the isolated fort and the Irish Council feared that a relieving force might 'receive such disaster as we shall be sorry for'. A similar operation under Bagenal three years earlier had almost ended in disaster at Clontibret, but his enthusiasm prevailed and he led his mixed force of experienced campaigners and raw recruits to Armagh without incident.

The Blackwater Fort was only just over 4 miles away, but Bagenal expected strong opposition from Hugh O'Neill and his allies and tried to evade them by avoiding the usual route when he marched out of camp on the morning of August 14th. The single long column was attacked almost immediately, however, with O'Neill and O'Donnell co-ordinating attacks from the flanking woods and bog. Soon the whole force was under attack, and in their efforts to reach the safety of the Blackwater gaps began to emerge between the regiments. O'Neill had also blocked the route with pits and a long bank and ditch, and although the leading regiments managed to fight their way across and get within sight of the fort, they were soon surrounded. Following behind, Bagenal raised his visor to see what was happening ahead and was shot in the face and died instantly. As news of his death spread and any hope of reaching the Blackwater evaporated defeat became inevitable and it was decided to fall back to Armagh. In the confusion many of the new recruits threw away their weapons and tried to flee, while others ignored the order to retire and attempted to press on. Many were killed or wounded when two of the powder barrels exploded and at one stage

it looked as if O'Neill's horsemen would be able to block the way back to Armagh, but by late afternoon the survivors reached the ruined city and sheltered in the ruined cathedral.

News of the battle sent shock waves through the Elizabethan world. Twenty five officers and over 800 men from Bagenal's army were dead, some 400 were wounded and 300 had deserted to 0'Neill, who was left in almost complete control of Ulster. The survivors were at his mercy, but were allowed to escape to Newry and even Williams and the Blackwater garrison were granted terms when they surrendered the fort.

Both the scale and the nature of the defeat were remarkable. A large, well-equipped, army under the Queen's Marshal had been decimated by a disciplined Irish force using the terrain and its tactical skills to deadly effect. But O'Neill failed to press home the advantage and the Elizabethan government was galvanised into action, culminating in the conclusive victory at Kinsale in December 1601.

#### **FACT FILE**

Rivalry between the O'Neills and Bagenals started in the 1540s, soon after Nicholas Bagenal fled to Ireland to escape a murder charge. After serving under Con O'Neill Nicholas became a powerful landowner and Marshal of the army, inevitably bringing him into conflict with successive



O'Neills. In August 1591 the rivalry became personal when Hugh O'Neill eloped with Henry's sister Mabel, although the marriage was unhappy and she soon returned to her brother's house in Newry. Henry's death did not end the her brother's Samuel played a prominent role in Mountjoy's feud. His cousin Samuel played a prominent role in Mountjoy's campaigns against O'Neill and Samuel's son Ralph was accepted as a suitable Plantation Undertaker after the Flight of the Earls in September 1607.

Map courtesy of The Board of Trinity College, Dublin



### **Castledillon Obelisk**

THE TITANIC STRUGGLE



## Shliabh gCuillinn

Castledillon Obelisk

Set on the summit of cannon Hill, in Turcarra townland, Castledillon Obelisk is a prominent landmark visible from much of the surrounding countryside. It consists of a tall tapering shaft above a base and plinth with an inscribed slate panel, set high on the south face.

Although now very difficult to read, the inscription records 'This obelisk was erected by the Right Hon. Sir Capel Molyneux, of Castle Dillon, Bart. in the year 1782, to commemorate the glorious revolution, which took place in favour of the constitution of the kingdom, under the auspices of the volunteers of Ireland'.

Castle Dillon, former home of the Molyneux family is on lower ground to the south-south-west but is hidden from view by trees and is not publicly accessible. Writing in 1804, Sir Charles Coote records that a second obelisk had been erected by Sir Capel, to commemorate the foundation of the Knights of St Patrick, but it cannot be traced.

The 'glorious revolution' was the removal of both the Westminster Parliament's right to legislate for Ireland and the requirement that the Irish Parliament must submit its legislation for approval. The Molyneux family had long been enthusiastic supporters of an independent Irish parliament and Capel's uncle, William Molyneux, an eminent scientist and member of Trinity College, had written a pamphlet in favour as early as 1698.

In practice, however, this parliamentary independence, the first for 300 years, proved more theoretical than real. Power and patronage still rested in London and in any case, the Dublin parliament represented only a small and privileged minority of the population. Growing resentment amongst the

unrepresented, fuelled by examples of revolution in both America and France, led to the foundation of the Society of United Irishmen, culminating in the 1798 Rising and the abolition of the short-lived independent parliament under the Act of Union of 1800.

#### **FACT FILE**

The Irish Volunteer Movement was established in the late 1770s, originally to defend Ireland against French invasion after regular troops were withdrawn during the American War of Independence. Soon, however, the Volunteers, led by such powerful figures as James Caulfield, Earl of Charlemont, threw their considerable strength behind the campaign for an independent Irish parliament.



The Muster of the Irish Volunteers in College Green on 4 November 177 by Francis Wheatley, RA. Courtesy of the National Library of Ireland.

In 1782 a convention of elected Volunteer delegates at Dungannon unanimously passed a resolution in favour of parliamentary independence. Within a few months the Parliament in Dublin gave way under the implied threat and passed a Declaration of Independence, which was subsequently accepted by the English Government – much to the joy of many establishment figures such as Capel Molyneux.





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