



## The Ulster Scots Archaeological Project

This education pack has been produced as part of the Ulster Scots Archaeological Project. This was a three year project formulated and funded by the Department of Culture, Arts and Leisure which aimed to raise awareness of Ulster Scots history, heritage and culture and to provide a clearer understanding of the impact that the Plantation had on the landscape, peoples and architecture of Ulster. It also aimed to raise awareness and understanding of the historical legacies of this period of history for everyone living in modern-day Northern Ireland. The aim of this education pack is to provide a resource for teachers so that they can assist children to investigate the Ulster Plantation, with a specific focus on the impact of Scottish planters in the first half of the 17th Century.



Year 1: Servants Hill



Year 2: Derrywoone



Year 3: Monea

The Ulster Scots Archaeological Project team undertook three excavations between 2012 and 2014: Servants Hill, Bangor, Co. Down in 2012; Derrywoone Castle, Co. Tyrone in 2013; Monea Castle, Co. Fermanagh in 2014. The research, processes, techniques, and results from these excavations provide the basis for the content of this pack.

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Useful Words

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## 1.0 Using this resource

This education pack is intended to be used by teachers to provide a platform to support Key Stages 2 and 3 of the Northern Ireland Curriculum. The information and exercises in this pack are drawn on the research, techniques of excavation, and results of the three archaeological excavations at Servants Hill, Derrywoone Castle, and Monea Castle. This pack is divided into three Modules. Module 1 gives a background to the Plantation and archaeological process; Module 2 deals with the excavation at Servants Hill while the excavations at Derrywoone and Monea are dealt with in Module 3. Each module includes exercises, questions/answers and suggestions for further work.

The philosophy of the Northern Ireland Curriculum ([www.nicurriculum.org.uk](http://www.nicurriculum.org.uk)) is about stimulating active learning, independent thought and questioning and thinking about information, and collaborative learning. It is hoped that this pack provides a resource base for teachers to explore these themes in line with the curriculum.

It is also hoped that this pack will provide a basis for investigating aspects of the two main communities in Northern Ireland, highlighting our shared heritage and culture and linking the past with the present.

The aspects of the NI Curriculum addressed by this pack are:

**Key Stage 2: The World Around Us** (history, geography, science & technology). Strand 3 - Place. Strand 4 - Change over time.

**Key Stage 3: Environment and Society** (Geography – map work, critical thinking, sense of place, local and national contexts. History – investigation of the past, different interpretations and perspectives, enquiry skills, critical thinking, problem solving, chronological awareness, challenging stereotypes, the impact of history on the present).

## Colour Coding Guide

Key Stage 2: Exercise

Key Stage 3: Exercise

Key Stages 2 & 3: Exercise

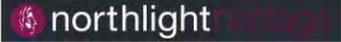
Key Stages 2 & 3: General Questions

Key Fact

## 2.0 Acknowledgements

This project was commissioned by the Department of Culture, Arts and Leisure (DCAL) in response to a need identified by the Ministerial Advisory Group for the Ulster-Scots Academy. The project is supported by the DoE: Historic Environment Division (DoE: HED).

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Find out more at <http://ulsterscotsarchaeologicalproject.blogspot.co.uk>

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## 3.0 General Introduction

This three-year project (2012–2015) involved geophysical survey and archaeological excavations at three Plantation-period sites, the production of several publications, including a comprehensive gazetteer of all known sites associated with the period, a general reader textbook and an all-inclusive Education Pack. Finally, an evening book launch will be held in 2016 where the results of this project will be presented. The information in this pack relates to Ulster Scots history, heritage and culture and the impact that the Ulster Plantation had on the landscape and people of modern-day Northern Ireland. The overall project objectives aim to highlight the experiences of Scottish planters following migration and their documented and archaeologically-uncovered relationships with the English and Irish.

A key objective of the project has been to promote cross-community outreach and engagement, through involvement in the archaeological excavations and outreach events. This aims to raise awareness of Ulster Scots history, heritage and culture; educate young people, students, locals and visitors about Ulster Scots history and the impact of the Plantation, and to promote cross-community sharing, tolerance and social inclusion through community engagement events during the course of the excavations.

Although the project and this pack focuses on the history of the Ulster Scots Plantation, the social and cultural impacts of this mass movement of people from Scotland to Ulster is relevant to the lives of everyone living in Northern Ireland today.

## 4.0 What is Archaeology?

**Objective:** Understanding Archaeology and Chronology

**Age Group:** Exercises for Key Stages 2 & 3

### Teachers notes:

This module includes exercises which relate to the processes involved in archaeological investigations. These exercises will increase the students' understanding of chronology. The module provides a basic background to archaeological time periods which can be referenced in other modules. Some of the exercises can be performed by the students independently and all will require teacher guidance. Questions dispersed throughout the text are suitable for both Key Stage groups.

The table below summarises the exercises in this section and how they relate to the curriculum.

EXERCISE	THEME / STRAND	KEY STAGE
1	Strand 4 – Change over time. The effects of time on materials in the physical and natural world	2
2	Usefulness of sources in telling their personal history	3
3	Use of natural resources to identify a suitable settlement site	2 & 3
4	Examining placename evidence to find out about the history of an area	2 & 3
5	Chronology – technological advances through the ages	2
6	Examining evidence and making reasoned inferences about the past	3

Archaeology is the study of how people lived in the past. Archaeologists are able to reconstruct the lives of our ancestors by examining several types of evidence – artefacts, which are human-made items such as pots, clay pipes and stone tools; ecofacts, which are environmental remains such as plants, cereal grains, animal bone or insects; the physical remains of human activity which have been left in the ground (the context), such as pits and layers of soil, and how these archaeological layers of soil have formed, which is known as ‘stratigraphy’.

**Stratigraphy refers to the deposition or laying down of layers of soil or stone through human activity. The deepest layer of soil is always the oldest. The top layer of soil is always the youngest.**

Archaeologists also find evidence by looking at old maps, reading written accounts of major events such as the Plantation or wars, looking at aerial photographs to examine the landscape, walking across the land looking for humps and bumps and scanning the ground using electronic equipment – this is known as geophysics. But the best way of gathering evidence is through carefully excavating archaeological remains. Anything that is excavated must be done very carefully and archaeologists create detailed records of everything that has been dug up by taking photographs, making drawings and writing descriptions of everything they find. Because once you dig it up it’s gone forever! Sometimes the soil is put back into the ground, as at our three excavations, but you can never re-excavate it and once the archaeology is completed the land is used to build new houses or roads, so the site cannot be explored or investigated again.

**Archaeologists can work out what people ate, what tools they used, what sort of houses they lived in and how they buried their dead by examining the evidence that is left in the ground today.**



**Key Stage 2 & 3: Which of these items would an archaeologist use and why?**

Archaeological objects that will survive in the ground for thousands of years:

- Pottery
- Stone Tools
- Iron/metal objects
- Burnt timber or cereal grains (wheat, barley)
- Teeth
- Bones
- Plastic

Archaeological objects that will rot/biodegrade after a few hundred years:

- Leather
- Hair
- Cloth
- Wool
- Skin
- Food
- Unburnt timber – eg roof rafters

**Teachers Notes:** For this exercise, pupils will be expected to recall the effects of natural processes on a range of items.

#### Exercise 1 – Key Stage 2

- Why do objects / materials biodegrade?
- Look at what you are wearing. If you were buried in what you are wearing what would an archaeologist find in 1,000 years' time? What would decay and what would survive?
- Do you have any artefacts/old things in your house? What are they made from? How old do you think the artefact is?

**Teachers Notes:** This exercise is designed to get the pupils to investigate their local historical remains. A class trip to a local historic monument would be useful for this exercise. Pupils will also learn about what clues and evidence they would use to build a picture of the past.

#### Exercise 2 – Key Stage 3

- Look at the cottages in the Raven map of Servant's Hill (p. 11). What parts of the cottages do you think would have been the first to decay? Think about old houses or churches in your area. Are their walls still standing? What about the roof? Compare what a roof is made from with the walls – timber is used for the rafters.
- What items would you leave behind to help an archaeologist find out how you lived your life?



Close up of the houses depicted on Thomas Raven's map of Servants Hill, Bangor. A short description of the houses has been added for your information.

## 4.1 Archaeological Periods

The first people to arrive on the island of Ireland marked the beginning of our archaeological heritage. Archaeologists use simple terms to describe when people were living on the island. The different names are defined by the technologies used during those time frames across Ireland, Britain and the rest of Europe.

**Mesolithic Period (8000–3700 BC):** 'Middle Stone Age' – *Meso* meaning middle and *Lithic* meaning stone. This was when people first arrived into Ireland. The whole island was heavily forested at the time so small hunter/gatherer communities built shelters along the coast and around large lakes, like Lough Neagh. Their homes were small, circular wooden huts and they hunted wild boar and fished for eel and salmon using stone tools made from flint. They also gathered nuts, berries and shellfish. Currently, the oldest known settlement site is at Mount Sandel, Coleraine, but it is possible that an even older settlement could still be found by archaeologists.

The life expectancy of Mesolithic people was about 40 years. But by then, men and women would already be grandparents!



Reconstruction of what a Mesolithic hut may have looked like.

**Exercise 3: Key Stages 2 & 3**

- Describe the shape of the hut. What materials would have been used to build the hut?
- Most Mesolithic settlements are located close to a water source – river, lake, the sea. Why?
- Look at the photograph. Why would this have been a good place to build a house or houses?

**Neolithic period (3700–2500 BC):** ‘New Stone Age’. This was a time of great change across the island. Many more settlers arrived, probably from Britain, bringing the ideas of farming with them. They also brought domesticated animals such as cattle, sheep and pigs. Red deer were also introduced from Britain at this time. The Neolithic farmers cut down a great deal of the forests in Ireland to make way for their farms, to grow wheat and to keep animals. Pottery was also introduced and archaeologists have found dozens of different types of Neolithic bowls – used for food, drink and as grave goods in burials. Until Christianity arrived into Ireland, people were buried with precious items such as jewellery or weapons. Ceramic bowls were a common grave good – these may have contained food to ‘feed’ the person who had died in their next life. People lived in circular and rectangular houses and divided the land into fields. The Neolithic period is also when great stone burial chambers were built in which small numbers of people (probably community leaders) were buried.

**Newgrange, Co. Meath is Ireland’s most famous Neolithic burial site. Look it up on an internet-based mapping service, such as SpatialNI. When was it built? What’s special about it?**



**Newgrange Neolithic Passage Tomb**



Legananny Dolmen, Co. Down. What is a dolmen? Are there any near your house?

**Bronze Age (2500–800 BC):** This is when metal was first used in Ireland. Copper and bronze were used to make daggers, axes and arrowheads. Gold was also used to make jewellery such as lunulae, torcs, ear-rings and bracelets. Archaeologists have found evidence of people living in villages and it is thought the population of Ireland at the time would have been about 1million!

One of the earliest pieces of gold found in Ireland came from County Down. The Deehommed ear-ring is thought to have come all the way from the Iberian Peninsula (Spain/Portugal) over 4,000 years ago! It is on display in the National Museum, Dublin.

**Iron Age (800 BC – AD 500):** People started using iron for weapons and tools during this time period as it was much harder and durable than bronze or copper. Archaeological evidence for the Iron Age is scant with only a few large earthworks (Navan Fort & Hill of Tara) and burial sites known.

The Iron Age is when stories about Cúchulainn and Finn McCool are set, though they were written hundreds of years later in the Early Medieval period. Can you find out about any of these stories?

**Early Medieval (AD 500 – AD 1100):** This is the time when Christianity spread across Europe. Monasteries were built across Ireland and the church became a powerful landowner. A lot of people built their homes close to these monasteries in order to be protected by the power of the church. Writing is first introduced into Ireland at this time and the country became famous for its scholarly monks who wrote many religious manuscripts such as the Book of Kells. The land was divided up into kingdoms and most people lived as farmers. Thousands of circular earthworks known as *raths* or ringforts were built during this time period. Most of these still exist today. The Vikings arrived into Ireland during this period and established towns at Dublin, Wexford, Waterford, Cork, Limerick and Galway.

#### Exercise 4: Key Stages 2 & 3

- The Irish word for a ringfort is *rath*. This word can be seen in modern placenames such as Rathcoole and Rathfriland. Can you think of a place beginning with 'Rath'? It probably means there was a rath / ringfort in that area.
- Where did the Vikings come from? When did they first arrive in Ireland? Did they build towns in England?
- Look at where the Vikings built towns in Ireland – there are none in Ulster. Why do you think that is?



Image from the Book of Kells, produced around AD 800

- Where can you see the Book of Kells?
- Who wrote it and why?
- Where was it written?

**Medieval (AD 1100 – AD 1600):** In the Medieval period the church grew very rich and powerful. Towns grew up around successful and wealthy monasteries such as Armagh but the majority of people still lived in rural areas. The Normans arrived and built hundreds of stone castles known as tower-houses. They also built large earthen mounds known as mottes. Many of these are still visible, especially in County Antrim, like Harryville Motte in Ballymena. Land was still mostly owned by either the church or wealthy lords/chieftains. Large castles, like those at Dundrum, Co. Down and Carrickfergus, Co. Antrim, both built by the Anglo-Norman knight, John de Courcy, were built across the island.

**Plantation Period (AD 1600 – AD 1650):** This focuses specifically on the Plantations of Ulster by the Scots and English.

**Post-Medieval (AD 1600 – AD 1800):** The post-medieval period is defined as the time when activities such as flour milling, glass and pottery manufacture and cotton and linen production became major industrial activities. Towns grew in size and people began exploring other countries such as America. Canals were built in Britain and Ireland and used for transportation as road networks and surfaces were unsuitable. Barges could also carry larger quantities of goods more quickly from place to place.

Tobacco was first introduced into Ireland from America in the early 1600s. Thousands of small, white clay pipes, made specifically for tobacco, have been found during excavations in most urban areas.



Clay Pipe

**Modern (AD 1800 – Recent):** This period includes the Industrial Revolution and technological advances such as electricity, sanitation, clean water supplies and antibiotics. The world's population increased dramatically and more people began to live in cities. People became dependent on global trade links for their food, energy (oil) and other raw materials.

Teachers Notes: This exercise will expect the pupils to have gained an understanding of the different archaeological periods previously described – what tools were used, what innovations were made etc.

#### Exercise 5 – Key Stage 2

- During what archaeological period were the following things first used in Ulster:
 

Computers	Wooden ploughs
Clay tobacco pipes	Iron axes
Mobile phones	Clay pots
Ink for writing	Trains

Teachers Notes: This exercise would be best suited to a discussion. The pupils will be expected to analyse the evidence of the given time periods and make reasoned inferences about the past. Note: the Mesolithic period was a time of relative peace with a small number of close-knit family groups populating the island. Also, they were the first people to arrive on the island.

#### Exercise 6 – Key Stage 3

- How do you think life during the Mesolithic would have differed from life as a tenant during the Plantation?
- How does your life today compare to that of a Plantation period settler? What are the main differences? Are there any similarities?

## 5.0 Module 1: The Background to the Plantation

**Objective:** Understanding the history of the Plantation

**Age Group:** Exercises for Key Stages 2 & 3

### Teachers notes:

This module includes exercises which relate to the background to the Plantation. These exercises will increase the students' understanding of differences between communities and how groups can learn to work together. The module provides a basic background to the Plantation which can be referenced in other modules. Some of the exercises can be performed by the students independently and all will require teacher guidance, which can be found at the beginning of each section.

The table below summarises the recommended Key Stages for each exercise and how each exercise relates to the curriculum.

EXERCISE	THEME / STRAND	KEY STAGE
7	Strand 4 – examining the effect of people on places	2
8	Examining evidence and making reasoned inferences about the past	3
9	Chronology Create a personal timeline – use of ICT	2 & 3
10	Recognising the past has a strong link to the two main communities in Northern Ireland today	3
11	Strand 3 – identifying changes in the landscape over time	2
12	Examining how the past has influenced our lives today	3

## 5.1 The Ulster Plantation AD 1600 – 1650

In the 16th Century, Ulster was predominantly Gaelic speaking and its people (mainly those on the northern and eastern coasts) had strong connections with Scotland. Throughout the past few centuries, many people in Ulster had family living in Scotland and although there were some differences, the people in the west of Scotland and Ulster shared a common language, culture and clan/family loyalties. Even before the Plantation, some soldiers in Scotland worked and fought for Irish Lords. Some of these soldiers were the younger sons of Scottish lords and would not inherit any family lands, so they settled in Ulster and became part of its history and culture.

In the early 17th Century, the queen of England, Elizabeth I, had many enemies. She was afraid that these enemies would use Ireland, and in particular Ulster, as a stepping stone for an invasion of England. During Elizabeth's rule, several military campaigns were fought in Ulster in order to subdue the population.

**These years of conflict became known as The Nine Years War and included the Battle of Yellow Ford and the Spanish invasion of Ireland at Kinsale, Co. Cork.**

In 1607, the Gaelic lord, Hugh O'Neill, fled to the European continent along with many friends and servants, in the hope of returning with Spanish military help. This event is known as 'The Flight of the Earls'. They did not return and Hugh O'Neill died in exile in Italy in 1616.

**Without Hugh O'Neill to stand against him, King James I of England was free to grant estates or 'Proportions' to the Protestant church, Trinity College Dublin, his Scottish supporters, English landlords, London Trade Companies and loyal Irish. Many Irish tenants and farmworkers soon became subject to new Plantation masters.**



Elizabeth I



James I



Hugh O'Neill

The London Companies, the group that controlled the Londonderry Plantation, were made up of 12 trades – Haberdashers, Fishmongers, Goldsmiths, Grocers, Mercers, Drapers, Salters, Vintners, Ironmongers, Merchant Taylors, Skinners and Clothworkers.

Can you work out what each trade is and its modern equivalent?

Do the London Companies still exist?

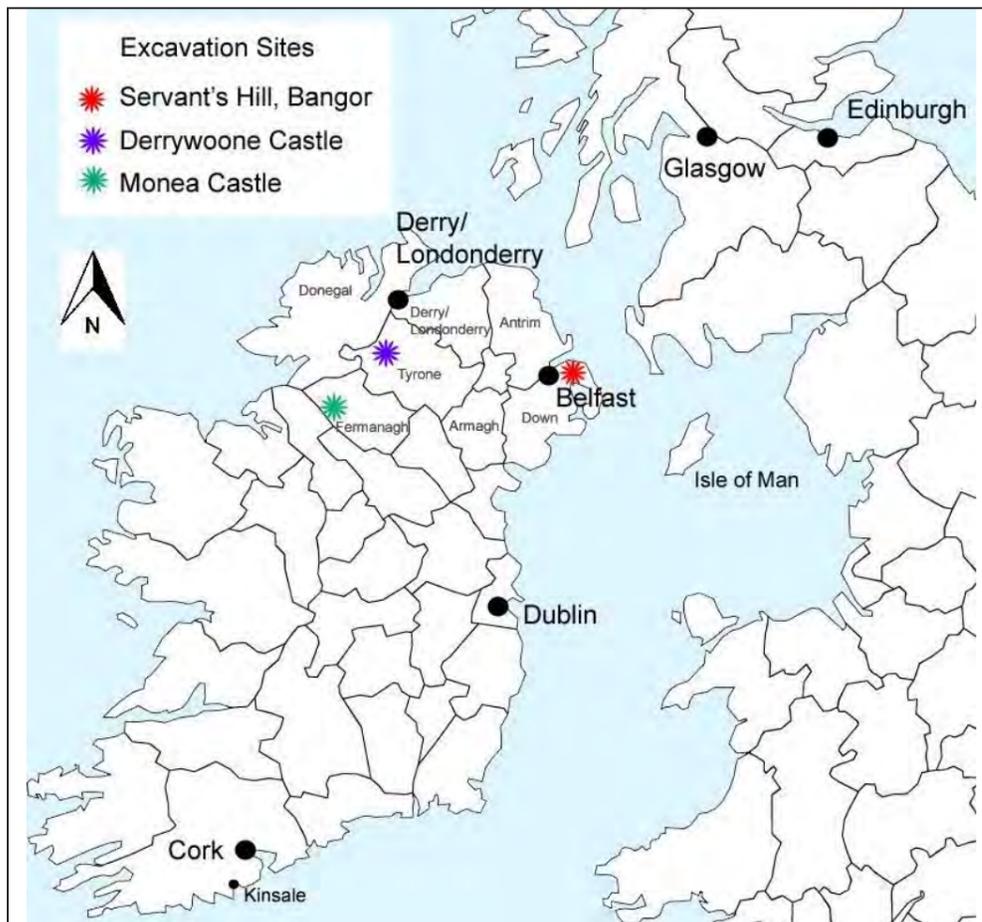
King James I granted lands to Scottish settlers or 'planters' in Counties Antrim and Down (the Hamiltons and Montgomerys in northern County Down), and to English and Scottish settlers and loyal Irish in Counties Armagh, Fermanagh, Londonderry and Tyrone. The aims of the Plantation included the establishment of small nucleated villages (a cluster of houses around the main house / castle), agricultural and land management reform, and an attempt at converting the Irish Catholics to Protestantism.

It was during the Plantation that the Protestant religion was introduced on a large scale into Ireland.

The landlord of each estate had to build a castle or large house surrounded by a wall (a bawn). He also had to build houses for his tenants and remain on the estate for at least 5 years. It was under these conditions that Derrywoone and Monea castles were built!

Sir James Hamilton, a Scottish man loyal to King James I, settled in Bangor, Co. Down. His settlement was described by Nicholas Pynnar as '*Sir James Hamilton hath buylded a fayre stone house at the towne of Bangor... about 60 foot longe and 22 foote broade; the town consists of 80 neue houses, all inhabited with Scotysmen and Englishmen*'.

Map No. 1



Derrywoone Monea Castle Servants Hill

Can you calculate the area of Hamilton's house in square metres?

Hamilton was granted further lands in Ulster by the King, which he populated with Scottish tenants. These plantations were so successful that Hamilton was knighted by the King in 1609 and only a short time later a new town was established at Bangor. His brother John was also a successful planter, establishing the towns of Markethill, Hamiltonstown and Newtownhamilton in Co. Armagh.

Sir Hugh Montgomery was another Scotsman loyal to King James. Montgomery was granted land along the Ards Peninsula and his Scottish tenants established settlements at Newtownards, Greyabbey and Donaghadee in Co. Down.

Perhaps the most important consequence of the Plantation was the spread of the English language into a Gaelic-speaking area.

But all was not well amongst the Irish...

### The 1641 Rebellion

Several years of unrest began in 1641 when many Irish chieftains rose up in rebellion against the English and Scottish settlers. Many settlers were killed and others were forced to seek refuge in towns or strongholds. The causes of the conflict are still unclear but it was probably a combination of factors – the decades-long imposition of the Plantation on the people of Ulster, discontent caused by some of the Irish beneficiaries of land grants getting into financial difficulties and a rise in English puritanism, which the Irish Catholics feared would lead to religious persecution. In 1649 Oliver Cromwell arrived in Ireland to restore English control. His army spent three years engaged in battle with the Irish and sieges took place in Drogheda, Co. Louth, Wexford,

Limerick and Galway. The war resulted in famine and thousands of lives being lost.

**Teachers Notes:** This exercise is designed to form the basis of a discussion on the origins of people and groups and the effects of these people on places.

**Exercise 7 - Key Stage 2**

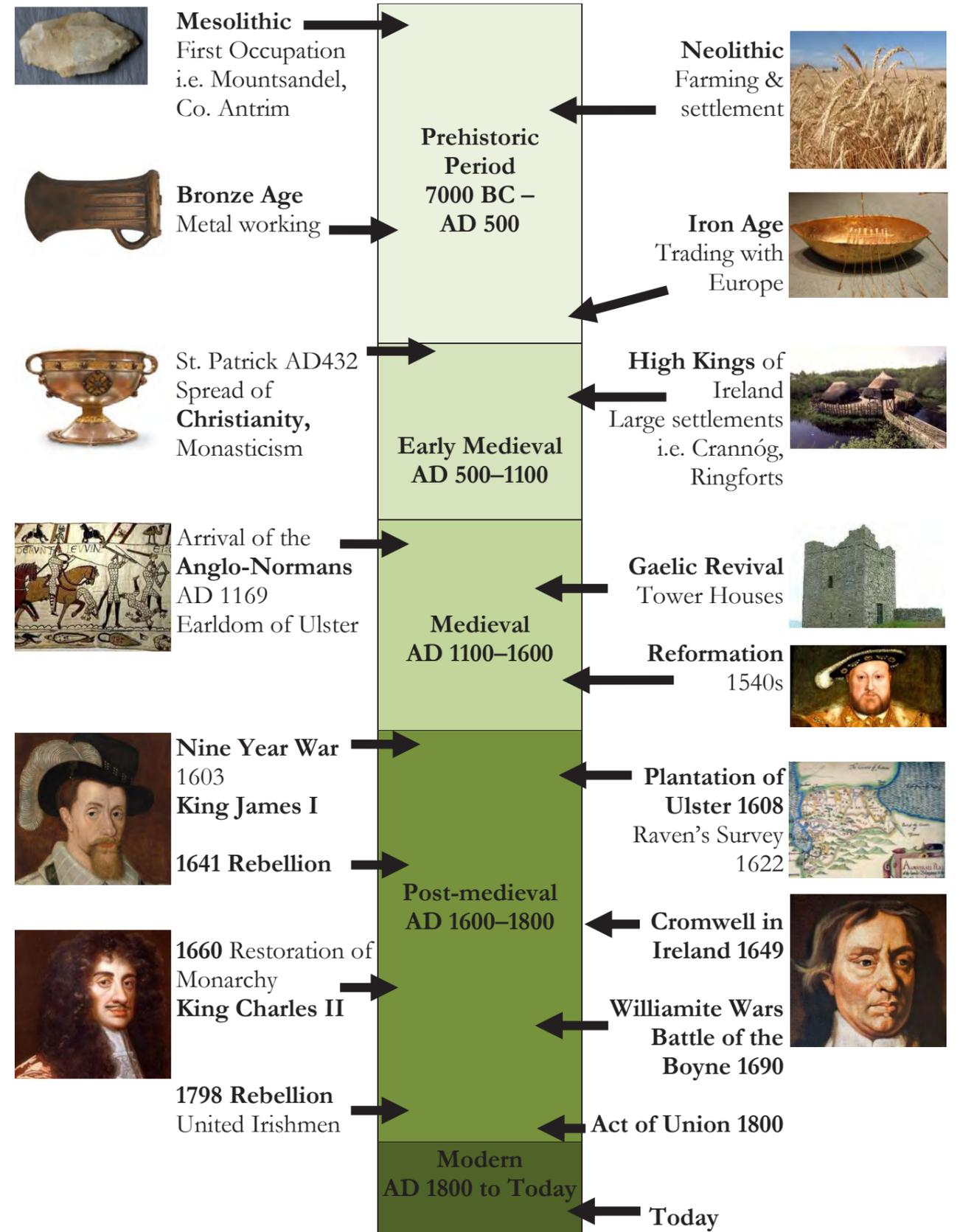
- Draw a map showing where planters and their tenants would have come from and where they settled.
- What important things do you think they would have brought with them? What would you bring with you if you were moving home?

**Teachers Notes:** This exercise is designed to promote discussion and stimulate enquiry about the past. It should also allow for discussion into how the events of the Plantation shaped the future of Northern Ireland.

**Exercise 8 - Key Stage 3**

- In small groups, discuss what problems may have been faced by the Scottish tenants moving to a new land.
- How do you think the Irish people would have reacted to this movement of new people into their land?
- How might the two communities have worked together? Do you think the Irish might have shared their resources (food, equipment, animals) with the newcomers?

**5.2 Timeline**



**Some significant dates:**

1588 Spanish Armada

1594 Nine Years war started

1601 Spanish defeat at the Battle of Kinsale; Irish allies withdraw

1603 Nine Years War ended, Elizabeth I dies, James VI of Scotland becomes James I of England. O'Neill surrenders (not knowing that Elizabeth was dead!)

1605 Gunpowder Plot (London)

1607 Flight of the Earls

1608 The Plantation Begins 1609. Bodley maps (early maps of Ulster) (<http://www.backonthemap.org.uk/theproject/historicalresearch/17sources/bodleymaps.htm>)

1609 King James I encourages the 12 London Trade Companies to take land in the newly created County of Londonderry.

1610–11 Settlers arrive from Scotland and England

1611 Carew's Survey of the Ulster Plantation (written descriptions and some maps)

1613 Construction begins on the Walls of Londonderry.

1622 Thomas Raven's picture-maps of the London Companies' settlements

1636 Voyage of the Eagle Wing (Presbyterians set sail from Ulster in an attempt to colonise the New World, but are driven back by bad weather)

1641 Irish Rising/Rebellion

1646 Battle of Benburb

1649 Oliver Cromwell arrives in Ireland

**Teachers Notes:** This exercise is designed to develop the idea of chronology. The practical element of the activity will help to reinforce this concept. **Tip:** get the youngest child to draw the most recent event (arrival of Cromwell) and the oldest child to draw the earliest event (Spanish Armada).

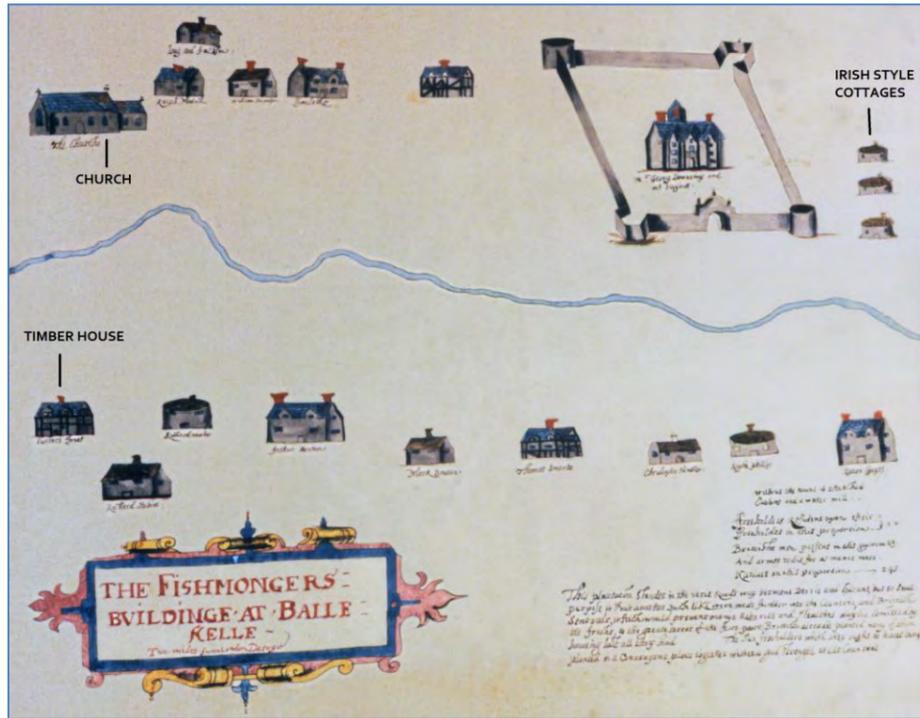
**Exercise 9 – Key Stage 2 & 3**

- Create a timeline in the classroom with each child drawing a single event relating to the Plantation of Ulster and the events that preceded it. The drawings can then be arranged in chronological order in the classroom or hallway. Events can include – Spanish Armada, James VI becoming king, Flight of the Earls, building Derry's Walls, a Thomas Raven-style map.

**Teachers Notes:** This exercise is designed to investigate and discuss the challenges that would have been faced by people moving to a new land at a time of conflict.

**Exercise 10 – Key Stage 3**

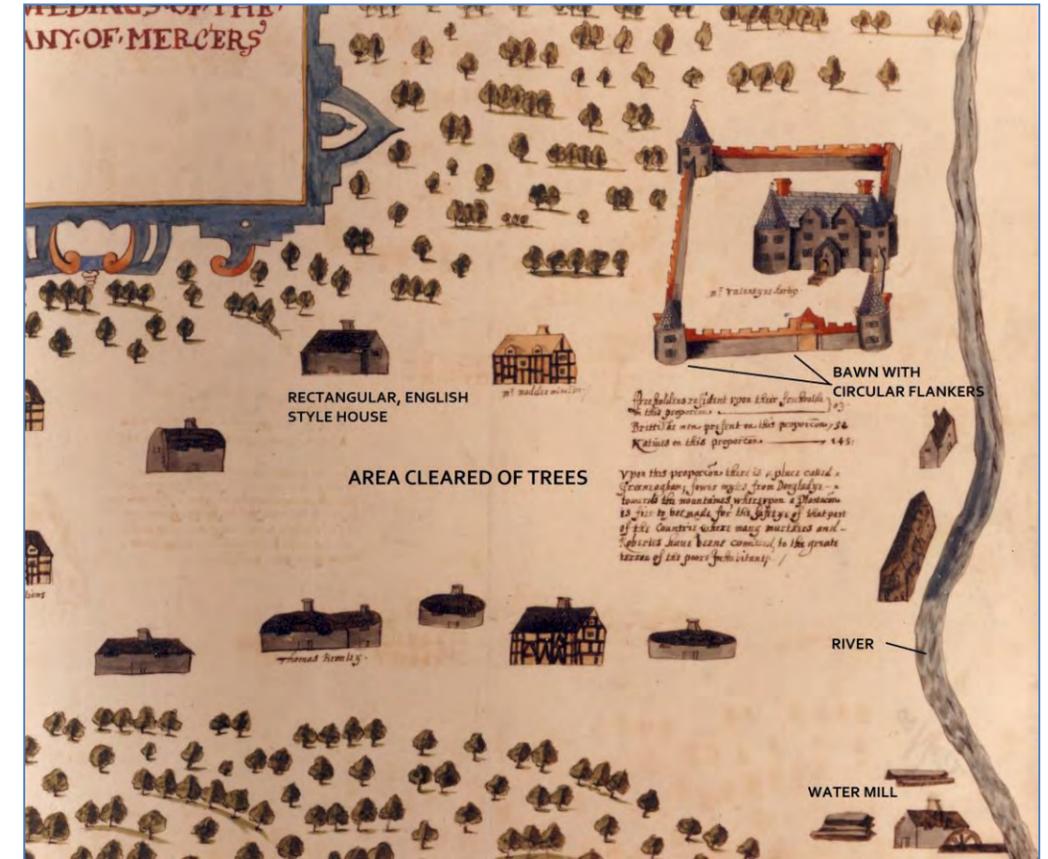
- Discuss how the events of the Plantation may have affected – a native Irish person (arrival of so many new people with a new culture and religion), an Irish Lord (having his land taken from him), a Settler / Planter (the pressures of building a new community), a Scots settler (adjusting to life in a foreign land), a London Company tradesman (building a business in a foreign land).



Thomas Raven's map of Ballykelly, a town in Co. Londonderry built by the Fishmongers Company. This Company was established in the 1200s and governed the sale of fish and seafood in the City of London. Notice how the different houses are illustrated. Each house has the owners name written beneath it, like the image below.



Can you read the name?



Thomas Raven's map of Kilrea, a town in Co. Londonderry built by the Mercers Company.

The Mercers Company was the greatest of the 12 that were sent from London during the Plantation. The Company acted as a trade association for general merchants (traders) including those who traded silk and velvet. Notice on the map how the area had to be cleared of trees before the houses could be built.

### 5.3 Map Makers (Cartographers)

The practice of drawing maps is called **cartography**. One such map-maker, Richard Bartlett, drew picture-maps of the English military campaign against Hugh O'Neill's enemy forces in the early 1600s. Bartlett was reputedly captured and beheaded as a spy.

As the planters moved into Ulster from England and Scotland, it was important that they had a visual record of their newly acquired properties – a map. During the Plantation several mapmakers (cartographers) were sent to Ireland to map the extent and nature of the new settlements.

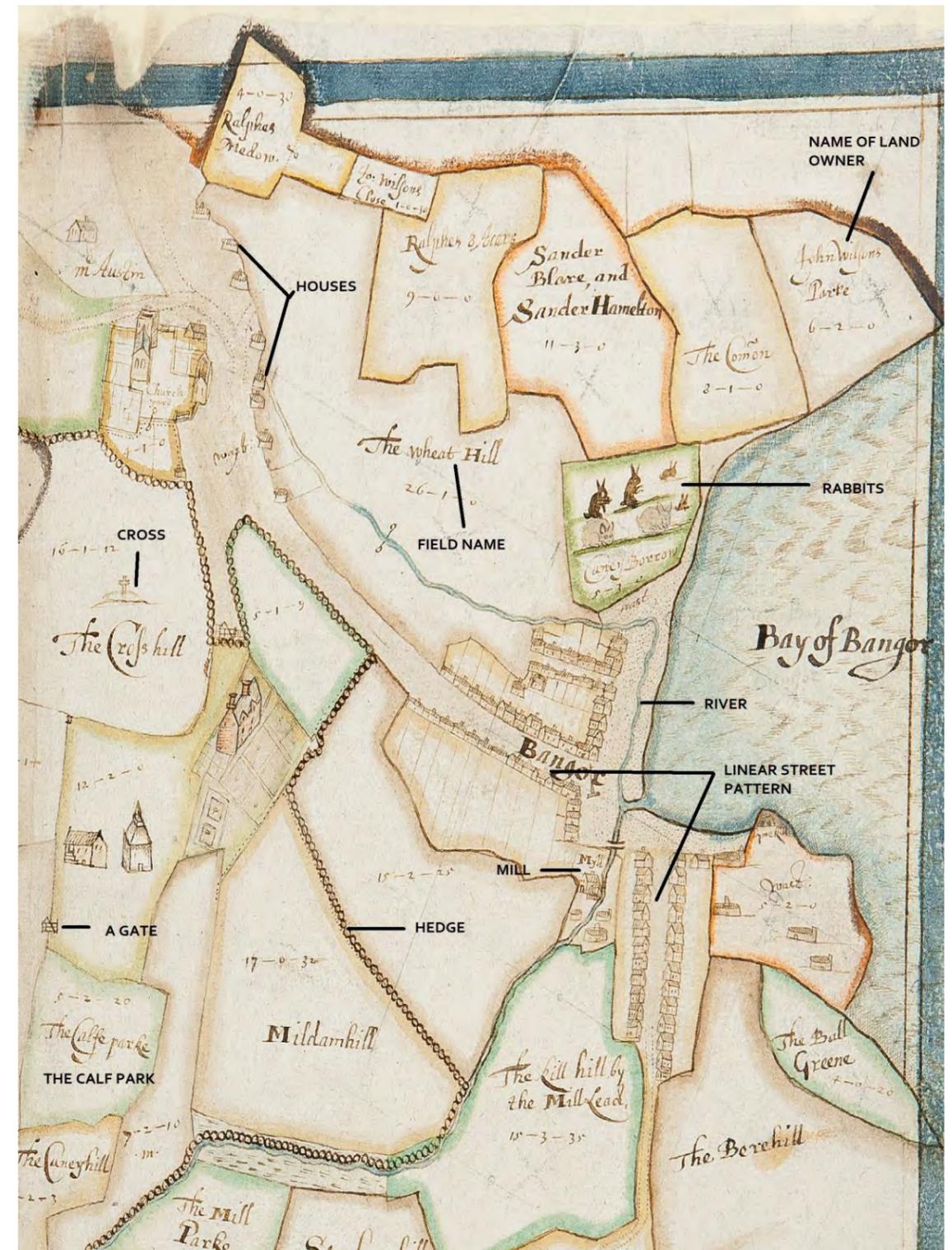
Thomas Raven was one such cartographer. Not only did he map Hamilton's estate in Bangor but also the progress of the Londonderry Plantation.

The Hamilton Estate was mapped in 1625/6 over a boundary dispute with the neighbouring Montgomery estate. The map (No. 1) shows Hamilton's House, the town of Bangor and the surrounding townlands.

What else can you see on the Bangor map? Buildings, natural features, animals?

How does this map differ from modern maps?

Map No. 2

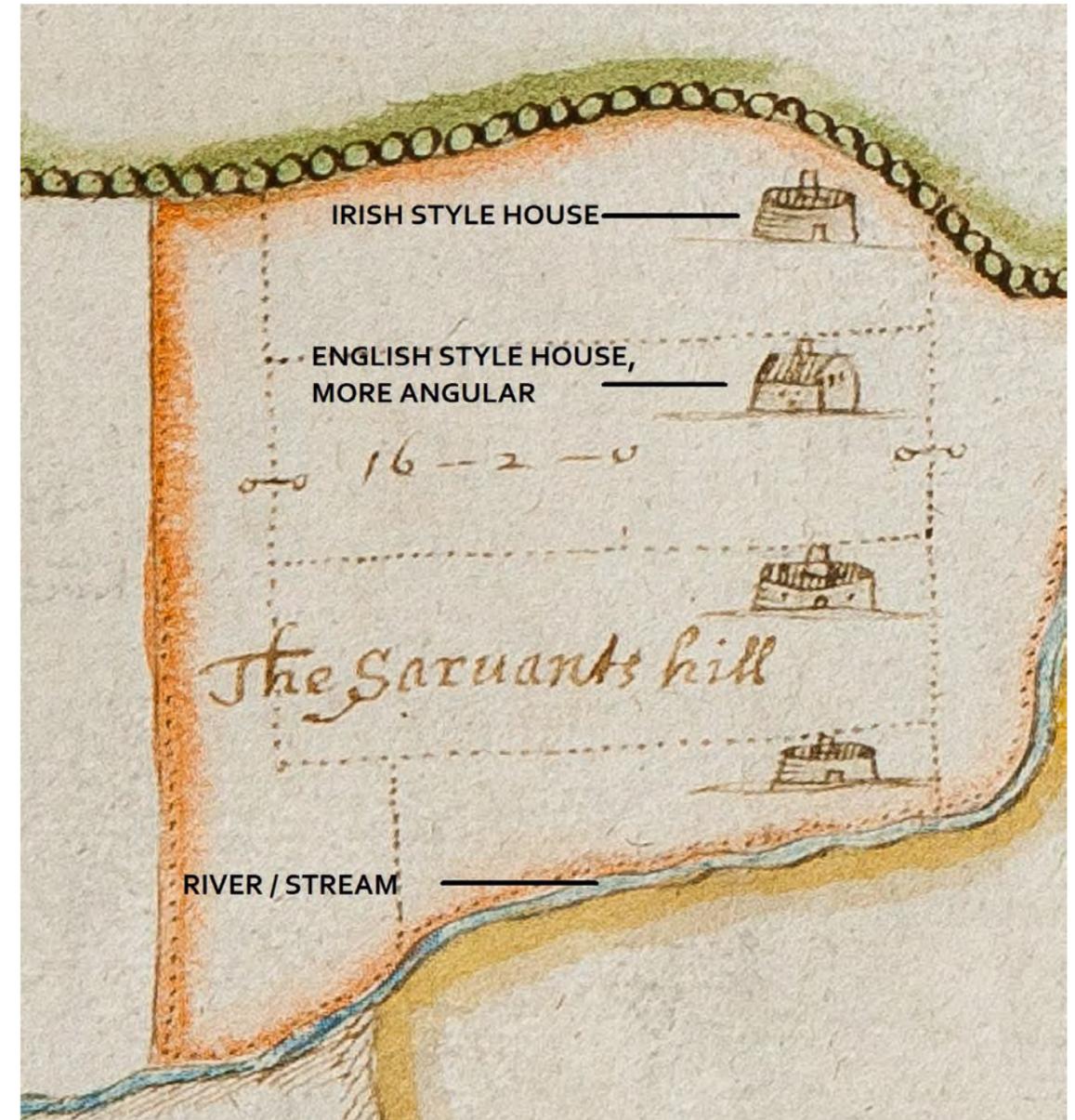


Part of Raven's map of Bangor. Look at all the different things illustrated on the map.

The Raven map of Bangor is one of several maps that were compiled into a book which is on display in the North Down Museum, Bangor. Also included in the book are lists of tenants' names within the 'Manor of Bangor', some of which reveal Scottish descent, for example 'McLelan'. 'Mac' or 'Mc' at the beginning of a surname means 'Son' and is a Gaelic tradition, seen in both Scotland and Ireland. Many Scottish surnames are based on the places in which people lived or came from, such as 'Boyd' from the Isle of Bute and 'Bruce' derived from Brix, a French city where the Bruces came from.

In one part of the Bangor map there are four houses marked 'Servants Hill'. Three of these houses are 'Irish' in character - single storey, oval in plan with thatched roofs, and a single central chimney. One house is rectangular, which suggests that it was built by either an English or Scottish family. The name 'Servants Hill' suggests that the houses were occupied by servants or workers of the Hamilton Estate.

Map No. 3



Close up of Servants Hill

The Raven map, which was drawn nearly 400 years ago, was so accurate that it was possible to trace field boundaries and a stream onto the modern landscape and identify the site of the old houses. The Servants Hill site was identified as a farm to the south-east of Bangor, which was located on a slight hill.

Map No. 4



Modern street map of Bangor. Compare with the Raven map - see how part of the harbour has been reclaimed and built upon. Look at how many more streets and roads and buildings have been constructed since Thomas Raven drew his map in 1625/26.

**Teachers Notes:** This exercise is designed to help the pupils identify changes in the landscape over time. By examining each map they can identify what buildings or field systems have remained the same and what has been destroyed or replaced.

#### Exercise 11 - Key Stage 2

- Compare Raven's map of Bangor (Map No. 2) with the modern day map (No. 4). Can you spot what buildings or shapes are the same and what has been changed over the years?
- Can you think of any buildings that have been built or demolished in your local area?

**Teachers Notes:** This exercise allows pupils to examine how the past has influenced their lives. The map will illustrate that the basic needs of a community do not change very much over the centuries. The surname exercise is designed to encourage the pupils to use various sources to research their family history. Each pupil can present their research to the class.

#### Exercise 12 - Key Stage 3

- Imagine you are a cartographer. Draw a map of your local area, illustrating the places and buildings that are important to the local community.
- Look at the names of the tenants on Raven's map. Can you tell who was English and who was Scottish / Irish? Now look at the surnames of your classmates. Can you tell where each family comes from based on their surname? Do you think it is more difficult today than 400 years ago to assign places of origin to people based on their name? Today in Northern Ireland you can find evidence of people having come not only from England and Scotland, but from all around the world.

## 6.0 Module 2: Servants Hill Introduction and Geophysical Survey

**Objective:** Understanding the process of archaeological investigation and excavation

**Age Group:** Exercises for Key Stages 2 & 3

### Teachers notes:

This module includes exercises which relate to Archaeology and the techniques used to find out how our ancestors lived. These exercises will increase the students' understanding of chronology and how time and the environment effects certain materials. Some of the exercises can be performed by the students independently and all will require teacher guidance.

The table below summarises the recommended Key Stages for each exercise and how each exercise relates to the curriculum.

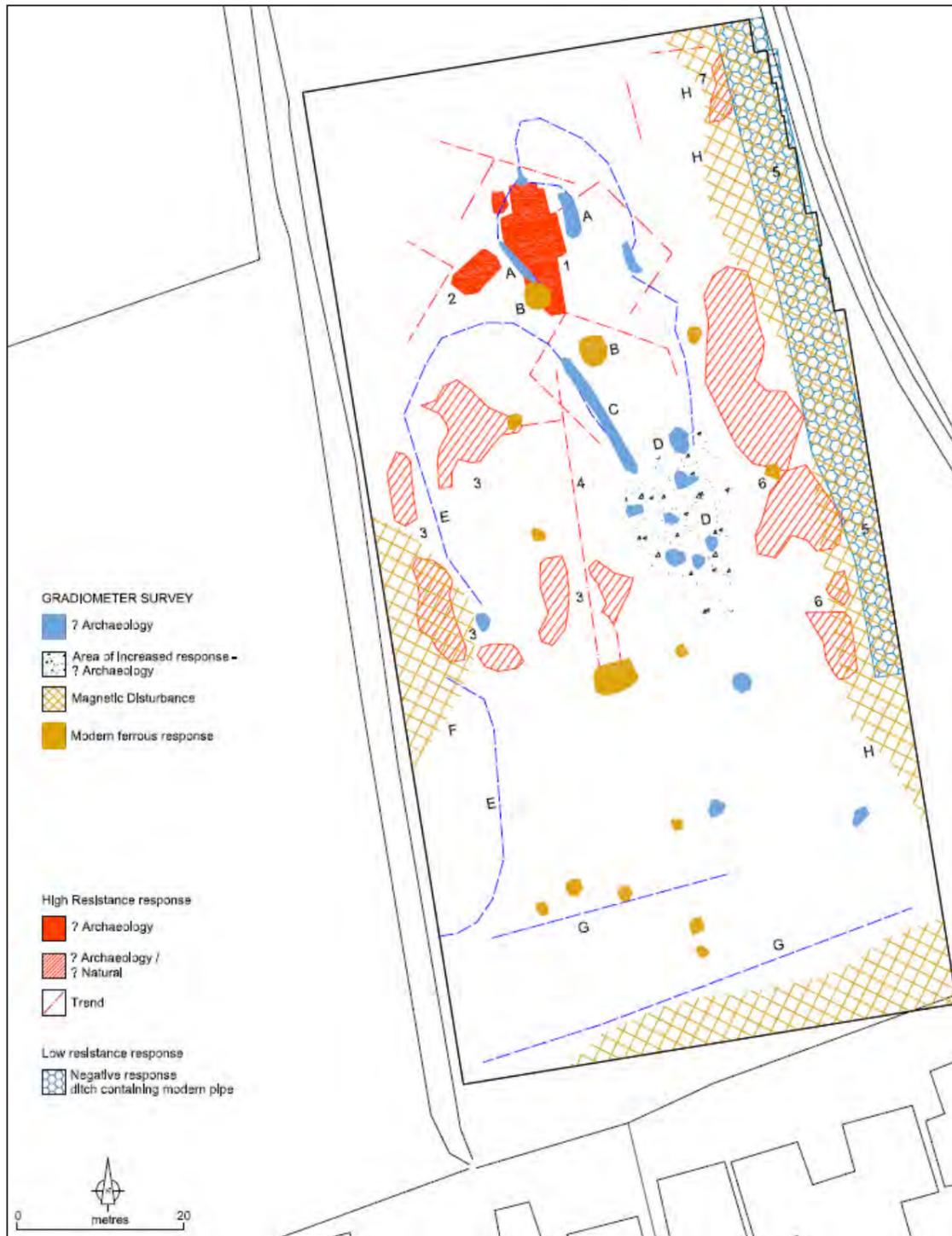
EXERCISE	THEME / STRAND	KEY STAGE
13	Strand 3 – how place influences plant and animal life	2
14	Can a building tell a story? Exploitation of local resources and building materials in the past	3
15	Thinking, Problem Solving and Decision Making – changes over time in a complex timeframe	2
16	How change impacts your local area	3
17	Strand 3 – positive and negative effects of natural and human events upon place over time	2
18	Investigating local historical buildings / sites. Pupils can work together to gather information from appropriate sources and present it to others	3

## 6.1 Geophysical Survey

Archaeological geophysics is a method of detecting archaeology beneath the surface of the ground, without having to remove any grass or soil – it is a ‘non-invasive’ technique. There are two main types of geophysical survey. **Resistivity** passes electrical current through the ground at regular intervals. The resistance is affected by archaeological features such as pits (dug features) and stone walls (built features). Both types of features result in different resistivity readings. This is because the walls are harder whereas the ditches and pits have softer soils than the surrounding ground. **Magnetometry** measures tiny changes in the earth’s magnetic field which are affected by the presence of underground features and the material within them, such as burnt wood or stones from hearths/fireplaces.

Both techniques are used to present an accurate picture of what archaeological remains may exist below the ground surface.

The geophysical survey at Servants Hill indicated several below-ground features or anomalies. These features may have been evidence of the houses depicted on Raven’s map. The area shown in red was thought to be the remains, perhaps the foundations, of a rectangular-shaped house. There were also several circular features which were thought to be pits or post-holes while the linear features were thought to be ditches or field boundaries. Of course you cannot know for certain what the anomalies actually represent until you start to excavate.



Geophysics results for Servants Hill (J.M. Leigh Surveys). This helps you to build a picture of what may lie beneath the ground before you start digging.



Geophysics in action. The above picture shows a fluxgate magnetometer being used. This piece of equipment measures the magnetic field of archaeological features, such as anything that has been burnt or baked, like a fireplace (hearth).

## What is an archaeological feature?

A 'feature' is an archaeological word for an ancient hole in the ground, such as a ditch, a post-hole, or a rubbish pit, that has been filled in with soil. It can also be used to describe built features such as walls.

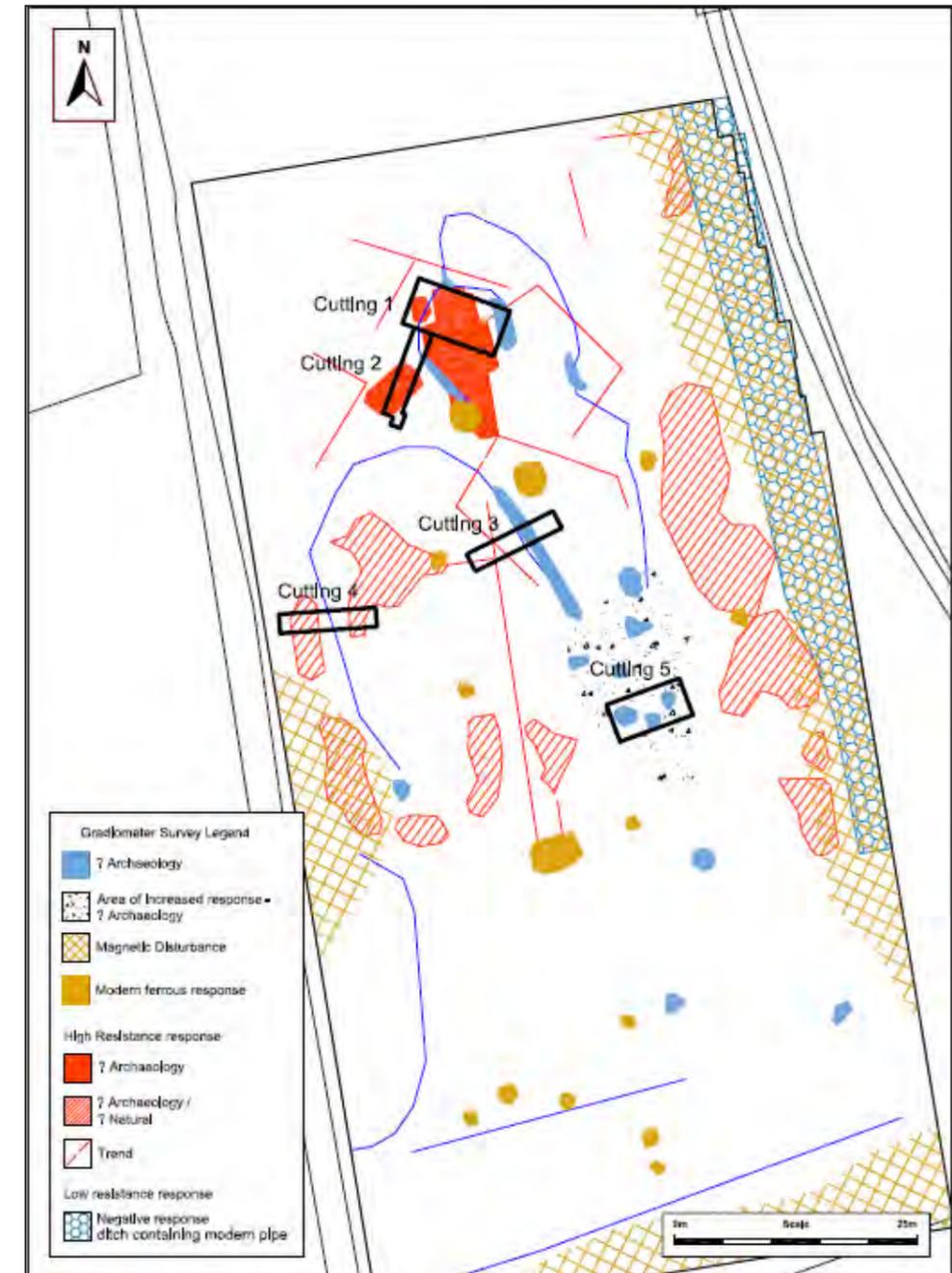
## What is a post-hole?

A post-hole is a hole in the ground which once held the base of a timber post for a house or hut. It is created by digging a hole, usually circular, and larger than the diameter of the post. A large timber post is then placed into the hole – like the telegraph or electricity poles you see. The post is held in place by packing stones and soil around it to keep it secure.

If the timber building burns down then little will remain of the post except for some burnt pieces of timber (charcoal) in the post-hole. The same is true if the building is left to decay and rot over time. Eventually the post-hole will become filled with more soil from the surrounding area. Artefacts such as pottery pieces can become incorporated into the post-hole soil. Archaeologists can then use these pieces of pottery to give a rough date as to when the house / building was first built or destroyed / abandoned.

## 6.2 Servants Hill Excavation

Based on the results of the geophysical survey, five trenches (cuttings) were excavated using shovels, spades and trowels – no machinery!



Geophysical survey showing the cutting locations. The locations were chosen based on the geophysical survey results.

### Cuttings 1 - 4

Although the archaeologists were hopeful that the 5 cuttings would uncover real archaeological features, you never know what you will find until you actually remove the soil. Many of the anomalies identified by the geophysical survey turned out to be areas of compacted sand and gravel. A small ditch was found in Cutting 1 – this could have been a field boundary like those shown on Raven’s map. Cutting 2 contained a small gully. Small pieces of burnt timber, known as ‘charcoal’, were found in the gully. These were scientifically dated to 1397-1133 BC (the Bronze Age) using a technique called ‘Radiocarbon Dating’.

What time period does the charcoal in the gully come from?

All living things are made up of carbon – you, me, trees, animals, grass, nuts, etc. After something dies, the amount of carbon in that organism begins to decay at a steady and measurable rate. Scientists are able to discover when something died (eg. a tree being cut down to make a wooden house or a red deer killed for dinner) by measuring the amount of carbon that is left in the archaeological sample (eg. Charcoal or animal bone). This measurement is presented to archaeologists as a radiocarbon date.

Six pits and a ditch were found in Cutting 3. There is a lot of sand in the ground at Servants Hill and the archaeologists think that these pits show that people were removing sand, perhaps to use as a building material. Sand can be used to plaster or render the outside of houses to make them waterproof.

Can you find out about other uses for sand?

Cutting 4 contained silty sands, ash, charcoal and stones (material that had been burnt and came from a fire or hearth). Some of the charcoal was radiocarbon dated to AD 245-397 – the Iron Age. One of the best artefacts from the whole excavation came from this cutting – a pin made from a pig bone thought to be Early Medieval in date.

What do you think life was like at Servants Hill during the late Iron Age, when the ditch was being used? Remember that Christianity is just beginning to arrive into the country and there might be some conflict between the incoming Christians and the pagan people already living here.

Archaeology can also be found in the topsoil and several pieces of pottery were found during the excavation.

How do you think the pottery ended up in the topsoil? What do you do if you break a cup or plate? Do you put it in the bin? Sometimes decomposed rubbish was scattered across the land as fertiliser. This would sometimes include fragments (sherds) of pottery.

Cutting 5 was the most exciting area. Two of the large circular features seen in the geophysical survey turned out to be shallow, circular depressions. One of these, Pit 1, was surrounded by curving lines of small stake-holes. Stone tools made from flint were found in the pit as well as a single piece of pottery. Charcoal and burnt cereal grains were also recovered.

**Charred or burnt cereal grains and charcoal are not always visible to the archaeologist. Bags of soil are collected and analysed in a laboratory. The soil is washed several times until only the burnt material remains. This material can then be looked at by specialists who can identify the cereal types (eg. Wheat) and what trees the charcoal comes from (eg. Oak).**

Charcoal from one of the stake-holes within the curving arc was identified as hazel. This produced a radiocarbon date of 1874–1627 BC - Bronze Age.

A charred wheat grain produced a radiocarbon date of AD 1411–1449 - Medieval.

**Hazel could be used for several things. The young branches can be used for making baskets or woven wattle walls of houses or fences. In autumn hazelnuts provide a good source of energy.**

These circular features were interpreted as the floors of small huts or houses. The arc of stakeholes surrounding Pit 1 could have been the remains of a wall constructed from wooden stakes and posts, with a woven wattle wall. The floors may have become sunken as a result of continuous cleaning and sweeping. Imagine your house had an earthen floor – you would need to sweep it regularly to keep the house tidy!

**The flint tools may have been used to process animal hides (skins). The hides can be used to make leather for clothing and shoes. Flint scrapers (like that found in cutting 5) were used to scrape the fat from the inside of the hide before it was turned into leather.**

The flint and charcoal radiocarbon date suggest that these huts were occupied during the Bronze Age period. The cereal grain that produced a Medieval date may have worked its way into the Bronze Age deposits if the ground were disturbed by ploughing or any other agricultural activity.

A gully was found at the south-west end of the cutting. The gully contained six circular features which contained lots of charcoal. The gully also contained a lot of charcoal, which was identified by a specialist as being from blackthorn/cherry, oak, hazel and alder trees. Fragments of flint were recovered from the gully. A radiocarbon date of 1412 – 1135 BC was produced from the hazel charcoal.

This gully may have been the wall of a structure, possibly a house, constructed of wooden posts and planks. The high amount of charcoal in the features suggests this building may have burnt down. It is likely that the rest of the house survives beneath the ground alongside the cutting.

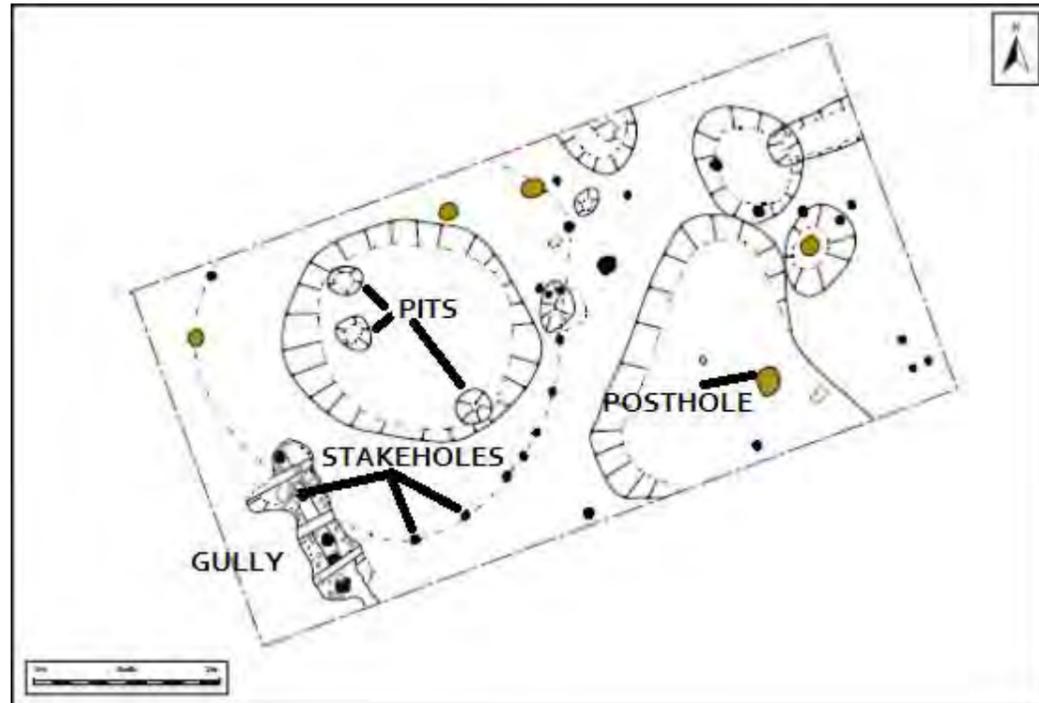


Computer-generated reconstruction of what the Bronze Age house might have looked like. See how dark it would have been inside – there probably wouldn't have been any windows in the walls

There were other circular features across the cutting which contained charcoal, flint and fragments of pottery. These features may also be Bronze Age in date.

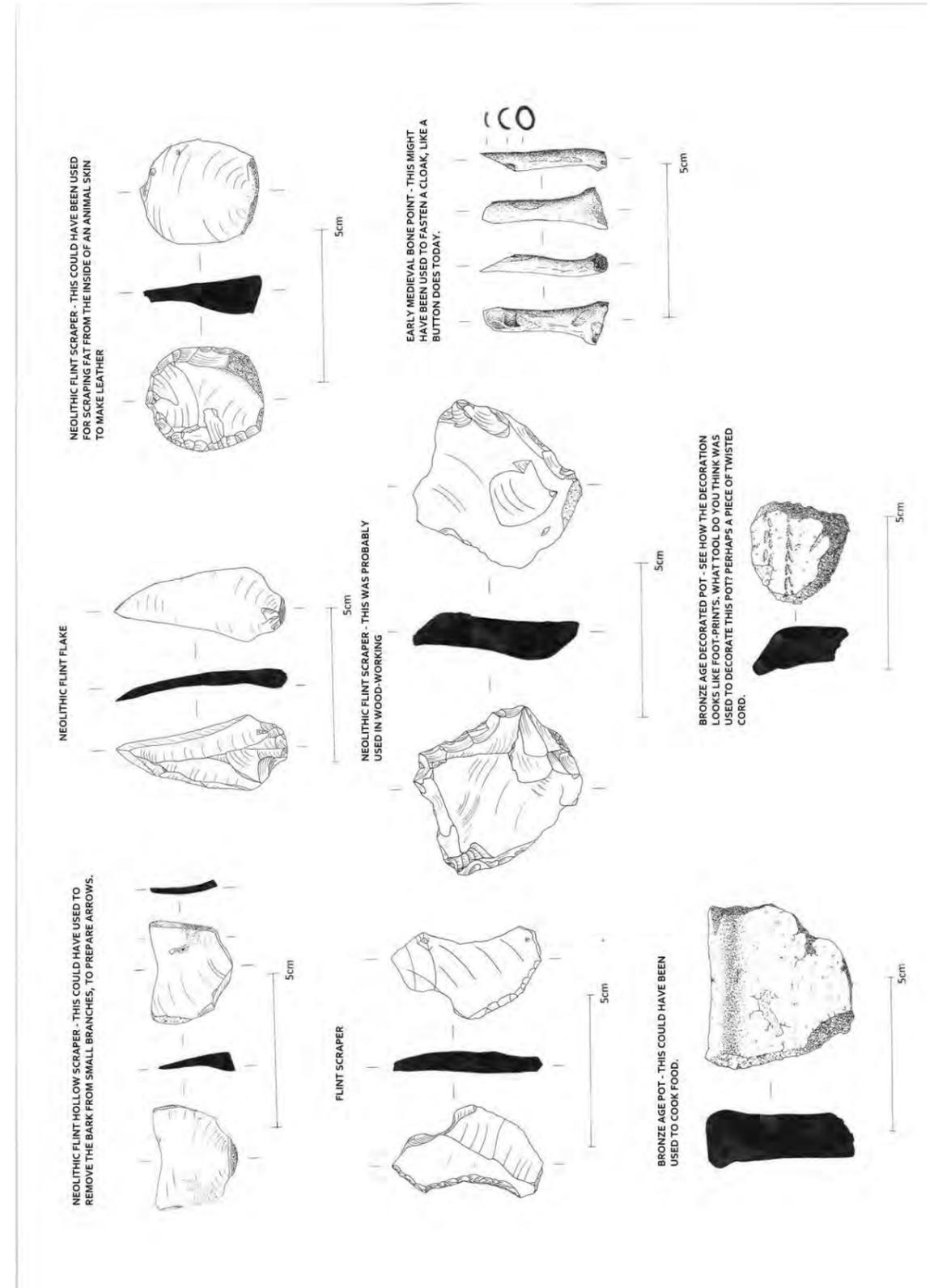


Cutting 5 after the topsoil had been removed. The dark circular stains turned out to be the Bronze Age houses!



Post-excitation plan of Cutting 5.

This is how archaeology is drawn. You can see the shape of the features that were excavated. All drawings are done at a scale of 1:20 or 1:50.



Drawings of some of the artefacts that were recovered from Cuttings 4 & 5.

**Teachers Notes:** This exercise is designed to raise awareness of different living things. Pupils also learn about the origins of materials. Note: items such as leather and wool, which are secondary animal products, can still produce a radiocarbon date.

#### Exercise 13 – Key Stage 2

- Which of the following can you radiocarbon date?

Animal Bone	Flint Axe	Glass
Leather Shoe	Apple Pip	Wooden Post
Wool Jumper	Clay Pot	Steel Fork

**Teachers Notes:** This exercise is best suited to group work. The pupils will need to think about the materials required to build a house. Bronze Age houses would have been mostly made of wood. Try searching for images of Bronze Age reconstructed houses on the Internet.

#### Exercise 14 – Key Stage 3

- Imagine you are one of the Bronze Age settlers at Servant's Hill. You need to build a house for your family. Why would this be a good place for a home? What building materials would you need?
- Why do you think the archaeologists didn't find the Plantation period houses?

## 6.3 Changes Over Time

By using stratigraphic sequences, radiocarbon dating and artefacts, archaeologists can discover how a landscape has been changed over time by human activity. Sometimes, complete sections of trees are found – usually in bogs or other wet areas where timber is likely to survive. Archaeologists can count the number of rings inside a tree and measure how old it is – this is called *dendrochronology*.

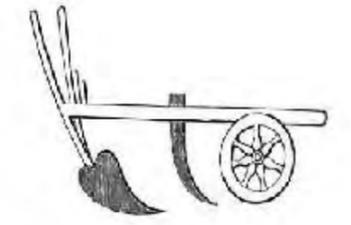


Growth rings of a tree. Oak is the best tree to use for dendrochronology. See how the width of the tree rings varies. Each ring = 1 year of growth. A wide ring means the tree grew very well while a narrow tree ring mean the tree didn't grow very much in that year. This could have been because the weather was very cold or the tree suffered some sort of infection.

Here are some of the changes to the landscape which an archaeologist can discover:

- Where people built their houses and villages.
- What materials they used to build their houses and how the house size and shape changed over time.
- What clothes people wore.
- What food people ate.
- What crops they grew and what livestock they reared.
- Where and how they buried their dead.
- What weapons they used to defend themselves.
- What tools they used and where they were made (workshops).
- What diseases people died from.
- What fuel they burnt to heat their homes.

### Farming Equipment – Bronze Age vs Modern



**Teachers Notes:** This exercise is designed to allow the pupils to see how techniques and activities in the same context (farm) change over time.

#### Exercise 15 – Key Stage 2

- Look at the above picture. What implements do you think farmers in the Bronze Age would have used? How have modern technological advances improved the lives of farmers today? How do you think a farm during the Plantation period might differ from a modern farm?

**Teachers Notes:** This exercise is designed to engage the students with elderly people within their families, to learn about the changes they have witnessed in their areas – development, technological innovations, etc.

#### Exercise 16 – Key Stage 3

- Ask your grandparents or parents about the changes that they have seen happen in their locality. Would they recognise their area now if they had seen it when they were children? Do they think all of the changes have made an improvement to their area?
- Examine a map of your local area. What do you think will change over the next 200 years?

## 6.4 Conclusions

The historic maps produced by Thomas Raven suggested that there may have been servants' houses on the Hamilton estate on a farm outside Bangor.

The geophysical survey results also suggested that there were features below the ground which may have belonged to the Plantation period structures identified on the map.

But the archaeological excavation did not produce any evidence for the Plantation Period. It did however reveal something altogether more extraordinary – evidence that 4000 years ago people were living on the same piece of land chosen later on by the Scottish Plantation settlers.

## 6.5 Further Work

Below are some suggestions for practical tasks that could be carried out to help better understand archaeology.

### Exercise 17 – Key Stage 2

- Decay & survival – bury a piece of cotton cloth, an apple and a plastic bag at the start of the school year. Dig them up in the summer. What has happened to each of the objects? How long would they survive in the ground?
- Human health – compare the teeth of a human with those of a dog and a cow. How are they similar and how are they different? What sort of diet does a dog and a cow have? Does this influence the shape of their teeth?
- Dating things, dendrochronology – ask the students if some of them could bring in a round piece of wood. Try to date the tree by counting the rings from the bark to the core.

### Exercise 18 – Key Stage 3

- Maps and land use – get an old map of your area and compare it to a modern one. How has the area changed? How do you think the land would have looked 400 years ago, 1000 years ago, 6000 years ago?
- Built Heritage – visit the local graveyard. Can you find the oldest headstone? How long do you think the graveyard has been in use? Can you tell from the dates on the headstones? Has the style, artwork or words used on the headstones changed over time?

## 7.0 Module 2: Derrywoone and Monea Castles Introduction and Geophysical Survey

**Objective:** Understanding the Plantation through examining specific buildings.

**Age Group:** Exercises for Key Stages 2 & 3

### Teachers notes:

This module includes exercises which relate to changes in a specific landscape over time. These exercises will improve the students' ability to examine evidence and make inferences about the past. Some of the exercises can be performed by the students independently and all will require teacher guidance.

The table below summarises the recommended Key Stages for each exercise and how each exercise relates to the curriculum.

EXERCISE	THEME / STRAND	KEY STAGE
19	Strand 4 – Change over time: how developments in transport have affected our lives.	2
20	Thinking, problem solving and decision making. Compare/contrast things that have changed/remained the same across the centuries.	2
21	Examining evidence and making reasoned inferences about the past	3
22	Stimulate enquiry about the past	3
23	Numeracy skills	2 & 3
24	Develop a line of reasoning to question reliability of sources	2 & 3
25	Strand 3 – Place: Recognising the uses of materials/animals in the past and the present	2
26	To select appropriate sources to gain information	3
27	Strand 3 – Place: The effects of people on places	2
28	Managing information to structure an historical enquiry	3

## 7.1 Derrywoone & Monea Castles

During the Plantation, large stone castles were built across Ulster and today, in Northern Ireland, you can still see the remains of just over 100 of these sites.

Derrywoone Castle is located in the Baronscourt Estate, just outside Newtownstewart, Co. Tyrone (**Map No. 1**). As part of the Plantation, these lands were granted to a man called Sir George Hamilton and it was he who built the castle in 1622. During the Plantation, detailed records or surveys were made of each of the estates – this was to ensure that the strict building conditions which were imposed upon each estate, such as building a castle and houses for the tenants, were carried out. It is because of these surveys that we know the castle at Derrywoone was being built in 1622.



Derrywoone Castle.

The survey in 1622 described Derrywoone castle as ‘a fair stone house, 4 stories high, which is almost finished, and a bawn of stone and lyme (lime), 90 foot

*long, 70 foot broad (wide) and 14 foot high*'. It is likely that George Hamilton lived in the castle with his family once the building work had been completed.

A tower to the north-east of the castle was built so that soldiers could defend the castle's residents – there are pistol loops in the walls.



**Flanker tower.**

Monea Castle is located close to Enniskillen in Co. Fermanagh (Map No. 1). It is one of the best preserved Plantation-period castles. It is situated on a rocky ridge overlooking marsh and low-lying ground. It is likely that the castle was, at some point in time, almost completely surrounded by water.

**Why would it be important to build your castle close to water?**

The only access to the castle would have been from the northern side. During the Plantation, the lands at Monea were granted to Sir Malcolm Hamilton, who later became Rector of Devenish and Archbishop of Cashel. Records show that building began on Monea castle in 1619 – by 1622 the surrounding bawn wall had been added. The castle was abandoned after it was destroyed by a fire around 1750.

**A bawn was a wall that had to be built around the castle or house. This was to show that the castle or house and its residents could be defended from attackers. This was one of the strict building conditions of the Plantation.**



**Monea Castle.**

**Isn't it interesting that all three estates – Bangor, Derrywoone and Monea – were granted to men called Hamilton! Do you think they might have been related? Can you find out where they all came from?**

Exercise 19 – Key Stage 2

- Using Map 1, what route do you think the Hamilton's would have taken to get to the sites of Derrywoone and Monea? Where do you think they might have arrived in Ulster from Scotland? What would be the easiest path to take? Remember, there weren't very many roads in Ulster in the 1600s and there are mountains such as the Sperrins between the east and west of the province. Look at a modern map or SpatialNI and try to trace the easiest route from the east coast to Tyrone and Fermanagh.
- Why do you think it would have been difficult transporting all their animals, tools and people?
- How long do you think it would have taken them to make the journey, without cars, bicycles or trains? How quickly can you travel from Bangor to Enniskillen today?

## 7.2 Similarities between Derrywoone and Monea

There are several similarities between the castles at Derrywoone and Monea. Both castles had a surrounding bawn wall, gun loops for defending the castle and both were built beside a lake.



Figure 1: Monea Castle



Figure 2: Monea Castle



Figure 3: Derrywoone Castle

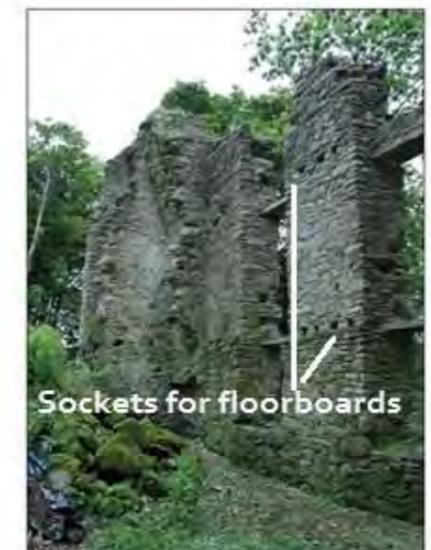


Figure 4: Inside Derrywoone Castle

Exercise 20 – Key Stage 2

- Look at the pictures of the two castles. How are they similar? What materials were used to build the castle?
- Think of your own house. What is it made from?
- How is your house similar to the castles and how is it different?
- Which home would you prefer to live in now and why?

Exercise 21 – Key Stage 3

- Both Derrywoone and Monea castles were eventually abandoned after a couple of hundred years. Both families moved into newer houses that were built close to the castles. Why do you think this might have happened? What reasons do you think the people had for building a new house?

Both castles display very similar building styles – with moulded corbelling, the Great Hall on the first floor, bedrooms on the top floor and circular staircases. Both Derrywoone and Monea castles were also built overlooking a crannog, a man-made island, which was the site of an important settlement for the local chieftains before the Plantation began – the Maguires in Monea and the O’Neills in Derrywoone.



Corbelling at Monea Castle



Corbelling at Derrywoone Castle

Exercise 22 – Key Stage 3

- Why do you think it was important for the new Scottish landowners at Derrywoone and Monea to build their castle overlooking the home of the previous Irish landowners?
- Why do you think the Scottish landowners may have had more power than the Irish? How would they have maintained their power and control?

### 7.3 Differences between Derrywoone and Monea

While both castles could be defended by soldiers, Derrywoone was built more as a private home while Monea was a fully defended castle. We know this because archaeologists are able to examine the evidence presented by the buildings themselves. Each castle is like a single, very large artefact, which gives us valuable clues into how people lived hundreds of years ago. Note how the windows at Derrywoone are much bigger than those at Monea. This would have meant that Derrywoone was a much brighter place with more sunlight able to get into the rooms. And smoke from the fireplaces could escape from the rooms more quickly!



Monea Castle – small windows on the ground floor.

What advantages and disadvantages would having large windows give you? Why would it be better to have small windows at ground floor level?

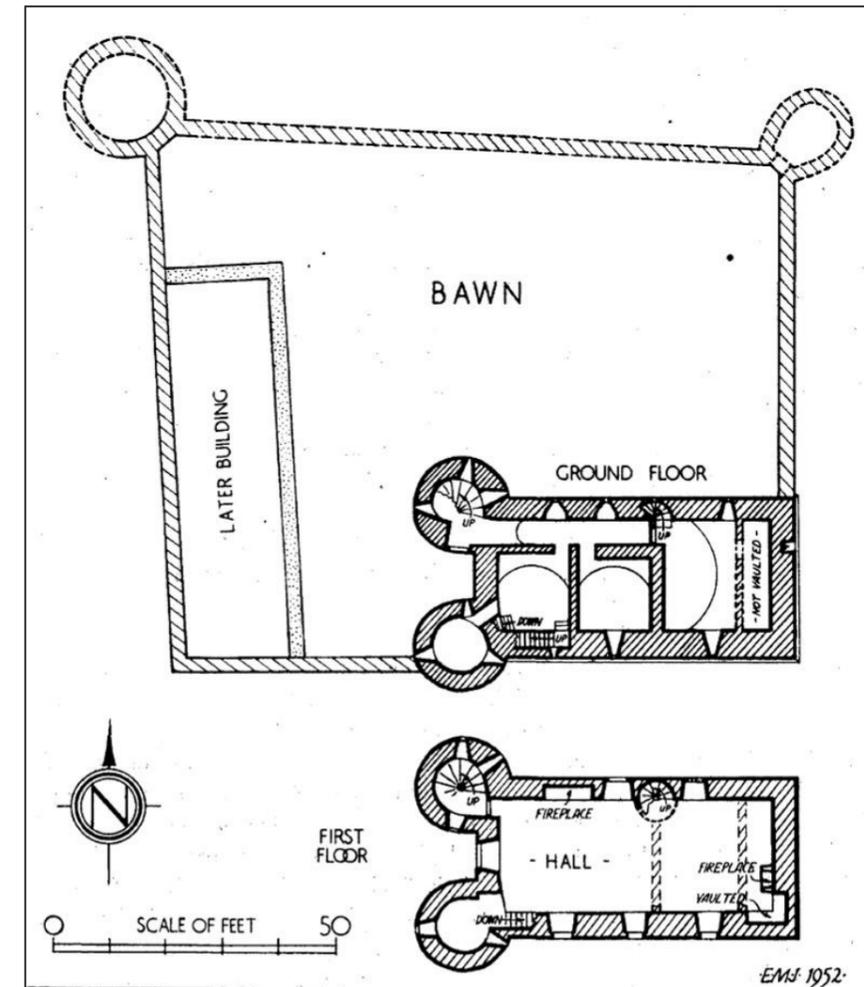


Derrywoone Castle.

Another difference is that Monea castle has a toilet, or latrine, built into the side wall. This is an unusual feature for castles built during the 1600s but was quite common in castles built before this time. Archaeologists think that this part of Monea castle might date to an earlier time period and that the rest of the castle was built during the Plantation. During the excavation, the archaeologists tried to prove that this was true by digging around the base of the latrine to examine the foundations of the castle. Unfortunately, all they found was a 2p piece from the 1980s!



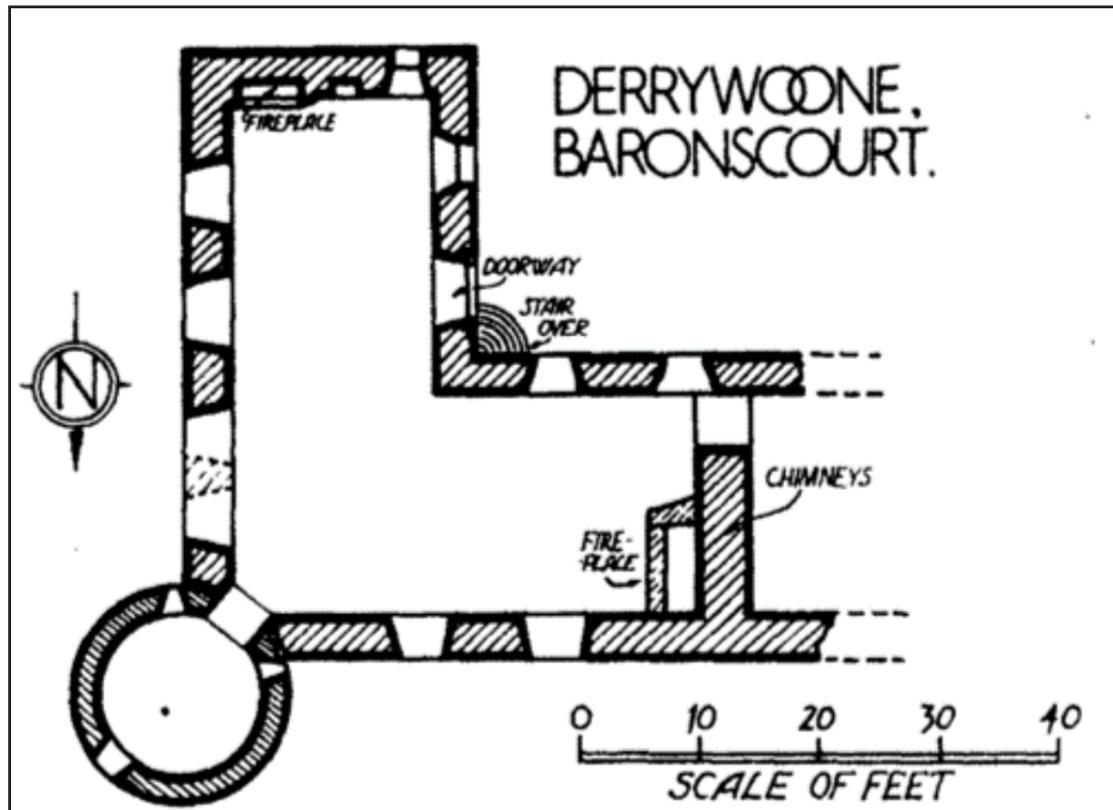
Digging at the latrine.



Ground and first floor plan of Monea Castle.

Exercise 23 – Key Stage 2 & 3

- Using the scale on the plan, calculate the perimeter of the bawn.
- Calculate the area of the castle. Remember that the scale is in feet. Can you convert this to square metres?



Plan of Derrywoone Castle.

Exercise 24 – Key Stage 2 & 3

- Look at the plans of Derrywoone and Monea. Both were drawn in 1951 and reflect the visible remains of the two buildings. What differences are there between the two castles? Do you think the plan of Derrywoone is an accurate depiction of how the castle would have originally looked? What parts of either castle are missing and why?
- Using the scale on the plan, calculate the area of the castle.

## 7.4 The Excavations

A geophysical survey was carried out in the grounds of both Derrywoone and Monea castles. These surveys highlighted areas where the archaeologists thought they might find evidence of the tenants' houses.



Cuttings at Derrywoone Castle.

A total of 15 cuttings were opened at Derrywoone Castle. Many of these cuttings revealed areas of disturbed ground with no archaeology visible. One of the cuttings did reveal a stone path which the archaeologists were able to match to one of the geophysical anomalies and also to a path marked on a 19<sup>th</sup> century map.



Stone path in Cutting 1 – this path was the same one marked on the 19<sup>th</sup> century map below.



Stone path from Cutting 1.

The cuttings closer to the castle identified the foundations of the stone bawn wall and a cobbled surface both inside and outside the main castle door. Most of the bawn interior had a hardened or beaten clay surface – this would have been the original floor of the castle.

Cobbles are small, round stones that are used to cover road or other surfaces. They are often found in farm yards, particularly stables, and on small, city streets.

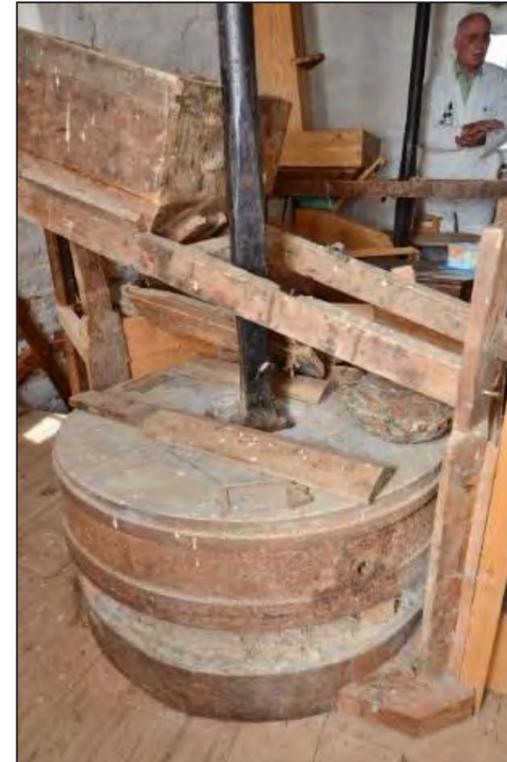


The cobbles.

Several artefacts were recovered during the excavations at Derrywoone, including pottery fragments, clay pipe stems, roofing slate, animal bone and some oyster shell. The most interesting artefact was a large, flat circular stone, discovered close to the castle. This was a quern stone and would have been used to grind cereal grain, such as oats and barley, into flour which could be used to make bread and cakes. It had been discarded after it was broken.



Timo proudly shows off his quern stone.



The quern stone might have been part of a mill wheel such as this one. It was common for mills to be built on plantation estates.

#### Exercise 25 – Key Stage 2

- The discovery of a quern stone at Derrywoone castle shows that someone might have been making bread for the people who lived in the castle and perhaps for everyone in the community. What other foods do you think they might have been eating? What sort of animals might they have kept?
- Look at the exercise sheet (2). Farm animals can be used for much more than meat. Things such as milk and leather are called 'by-products'. Try to match the by-product to the animal. And remember, you can get the same by-product from more than one animal.

Exercise Sheet 2 – to be used with Exercise 25



Pig



Cattle



Sheep



Cheese



Bone Combs



Bone Pins



Sausages



Leather Pouch



Milk



Wool Jumper

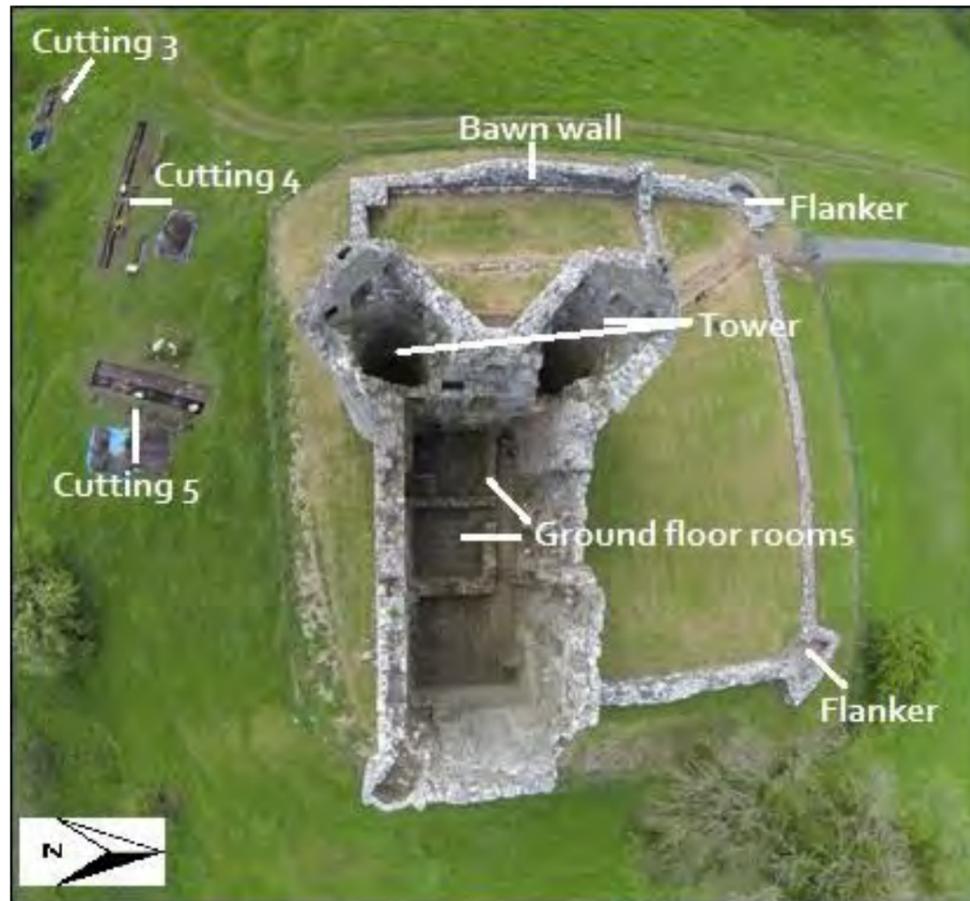


Leather Shoes

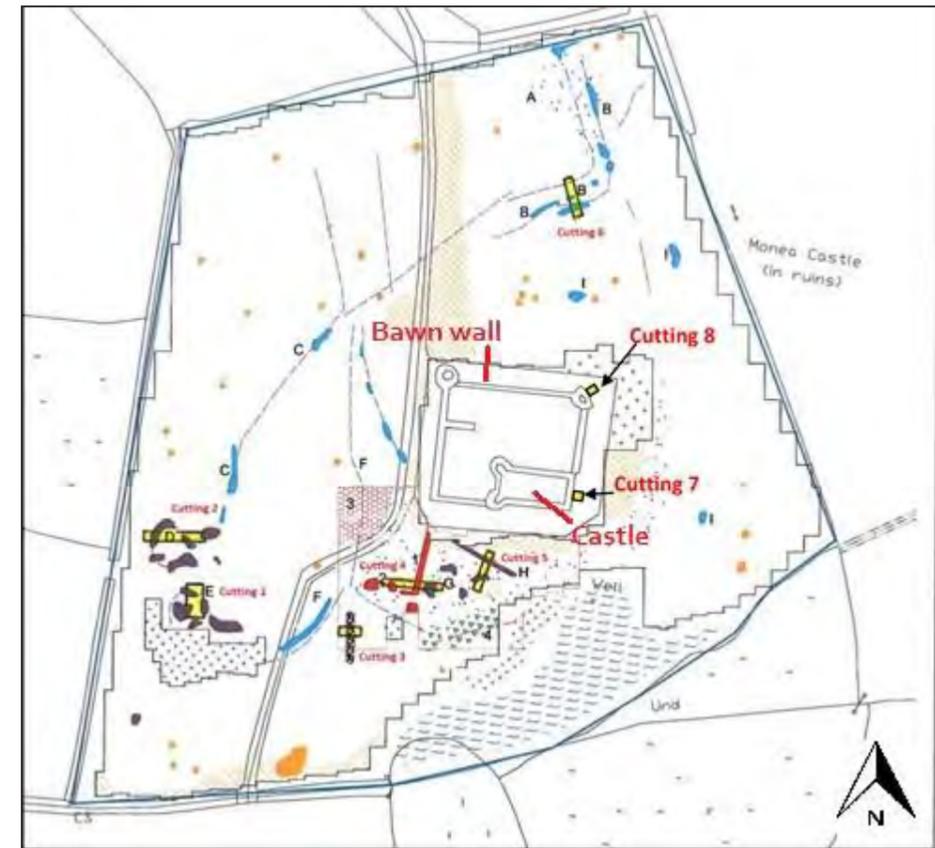
Exercise 26 – Key Stage 3

- Looking after a castle would have involved a lot of people doing different jobs. What jobs would have been done around the castle? Think of all the tasks that needed to be done around the castle. What jobs are done in your house?
- Imagine you are one of these workers. What do you think life would have been like living under the protection of the Hamiltons?

At Monea, a total of seven cuttings were opened by the archaeologists. Five of these cuttings were located away from the castle and targeted geophysical anomalies that the archaeologists thought might have been the tenants' houses. The remaining two cuttings were located at the base of the castle wall and one of the bawn flankers. The archaeologists hoped that these cuttings would tell them more about how the castle had been built.



The cuttings at Monea Castle.



Results of geophysical survey with cuttings overlaid.

As at Derrywoone and Servants Hill, the cuttings did not reveal evidence for the small houses that would have been located around the castle. It seems likely that there are no below-ground traces of these houses, which were probably constructed of mud, timber and grass sods. Once they had been abandoned, all traces of these buildings would have disappeared.

A stone-filled ditch was identified in Cutting 4 which matched a linear geophysical anomaly. The function of this ditch is unclear but it may have been used to funnel water away from the bawn and down into the lake.

The archaeologists did uncover some interesting artefacts at Monea however. Three lead musket balls were found around the castle. Lead is a type of soft metal that has many different uses - it is even used in the

corners of roofs to make houses waterproof. One of the musket balls looked as though it had been fired as it was flat on one side, having possibly hit a tree or the ground or something else! The other two were still spherical and may have been dropped by a soldier while on duty – perhaps from one of the turrets guarding the doorway.



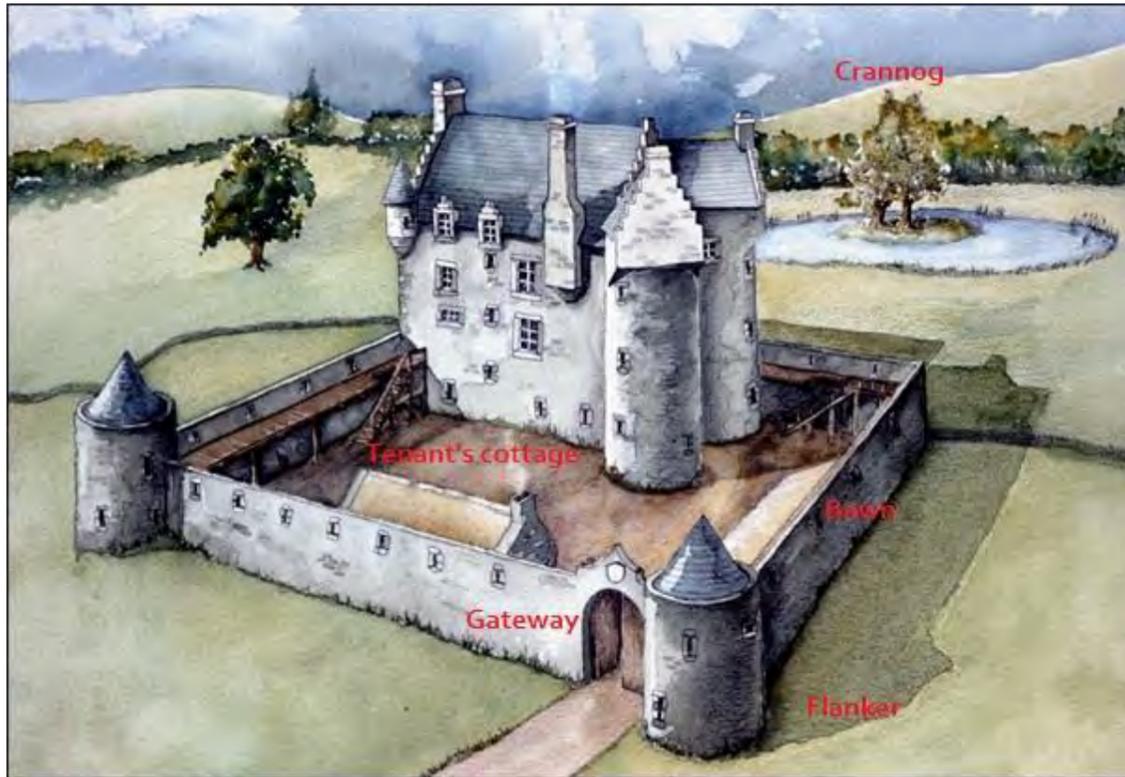
**One of the musket balls from Monea castle.**

Another intriguing find was a stone axe. This was discovered hidden in a rock in Cutting 6 to the north of the castle. This axe dates to thousands of years before the castle was built. Some archaeologists think that people during the medieval and post-medieval periods collected older artefacts as relics. Stone axes, such as the one found at Monea, were thought to have special powers which could protect people and their homes from disasters such as lightning strikes and general misfortune. Perhaps one of Malcolm Hamilton's tenants found this axe and kept it hidden away until archaeologists discovered it hundreds of years later!



**Tony with the stone axe.**

The stone axe was made from a sedimentary rock that could be easily carved and polished into a specific shape. What do you think the axe might have been used for?



An artistic reconstruction of how the castle might have looked after it was first built.



The castle today – what's missing?

Exercise 27 - Key Stage 2

- Compare the two images above. The illustration shows how archaeologists think Monea castle would have looked when it was first built while the photograph shows the castle today. What has happened to the castle since it was built? The roof has now gone, and the stones from the bawn wall. Where might these have gone?

## 7.5 Conclusions

The excavations at Derrywoone and Monea Castles failed to reveal any evidence for the tenants who would have lived around the castle.

### Exercise 28 – Key Stage 3

- **Be an archaeologist for a day.** Using the **Building Record Sheet**, visit a ruined building close to your school. Use the sheet to record what is left of the building today. Try to identify what parts of the building are missing or if the building was added to at a later date, like adding a conservatory to a modern house.

### BUILDING RECORD SHEET

Name of Building/Site	
Type of Building/Site – church, castle, mill, etc.	
What can you see?	
What do you think is missing? Has anything been added?	
Drawing of the building	
Name:	Date:

## Recap exercises

### Exercise 29 - Key Stage 2

- In groups, imagine you are a family of Scottish tenants that has been brought over to Ulster to build a new life in a strange land. Which part of the province would you prefer to live in and why? What materials / items would you bring with you to make the journey more comfortable and make your new home resemble your old home in Scotland? How different do you think life would have been for the new tenants?

### Exercise 30 – Key Stage 3

- In groups, discuss how difficult it would have been for the Scottish arrivals to build a new life in Ulster.
- Do you know anyone who has come from another country to live in Ulster? How easy / difficult was it for them to settle into life in Ulster?
- Look around the area you live in – can you find any Plantation-period archaeological sites such as castles or churches?

## Useful words

**Anomaly:** A shape or pattern in a geophysical survey which is different from the surrounding geology and might have resulted from human activity.

**Artefacts:** Items such as pottery, glass, flint or metal tools or weapons which tell us how and when people lived in the past.

**Bawn:** A wall that surrounds a large house or castle.

**Context:** A single archaeological event, perhaps the digging out of a ditch or the insertion of a timber post into the ground, a fire, the throwing away of a broken pot or the gradual filling of a rubbish pit. The artefacts identified with the context will help the archaeologists find out when the event took place, and why.

**Crannóg:** A man-made island in a lake. They typically date to the Early Medieval period and are thought to have been the settlements of high-ranking individuals / leaders.

**Dendrochronology:** Climatic patterns are reflected in the width of the annual growth rings of trees. Dendrochronology deciphers the annual patterns of these tree-rings. Oak is particularly useful and Irish archaeologists can use a 7,000 year-long tree-ring record to date any suitable wood found on an excavation.

**Dolmen:** A type of megalithic tomb dating to the Neolithic period. Usually constructed of three upright boulders, capped by a single boulder.

**Excavation:** The process of revealing, digging and recording an archaeological site.

**Geophysics:** The process of inspecting beneath the ground surface for archaeological features. This is done using several methods or techniques including resistivity and magnetometry.

**Non-invasive:** A means of inspecting the ground without damaging it.

**Nucleated Village:** The clustering of houses around a central building – in Plantation villages the focal point would have been the bawn or castle.

**Planter:** British gentlemen who came to Ireland after they had been given land by the King.

**Post-hole:** Usually a circular pit with evidence that it held a wooden post. This evidence may include the presence of packing stones, a post-pipe (silt deposit that indicates where the old post used to be) or charcoal (if the post had burned down) in the soil within the hole.

**Radiocarbon dates:** Material which was once a living organism, such as wood, bone or grain can be radiocarbon dated. The radiocarbon date can tell when the organism died.

**Rath:** A circular earthwork built during the Early Medieval period. Rathes were small settlement sites. Excavated raths have revealed evidence of houses and animal enclosures.

**Sherd:** A term used to describe a fragment of pottery.

**Stratigraphy:** Layers of soil or stone (strata) which generally accumulate one on top of another. The more modern material is at the top and the deeper you dig, the older the layers become.

## List of resources

### Plantation Period Sites you can visit:

Dunluce Castle	Portaferry Castle	Hezlett House
Springhill House	Derry's Walls	Brackfield Bawn
Bellaghy Bawn	Dungiven Bawn	Enniskillen Castle
Castle Balfour	Monea Castle	Castle Archdale
Tully Castle	Portora Castle	

## Guides & Books

### *Plantations*

Ards and North Down (undated) *Ulster Scots Biographies* (available to download from [www.northdowntourism.com](http://www.northdowntourism.com)).

Bardon, H 2011 *The Plantation of Ulster*. Gill & Macmillan.

Blades, B S 1981 'In the manner of England: Tenant housing in the Londonderry Plantation'. *Ulster Folklife* 27, 39–56.

Brannon, N 1999 'Archives and Archaeology: The Ulster Plantations in the Landscape', in Egan, G and Michael, R L (eds) *Old and New Worlds*. Oxbow Books, 97–105.

Duffy, P J 1983 *Farney in 1634: An examination of John Raven's Survey of the Essex Estate*.

Hume D 2011 *Eagle's Wings: The Journey of the Ulster Scots and Scotch-Irish*. Colourpoint Books, Newtownards.

Robinson, P S 1984 *The Plantation of Ulster*. St. Martin's Press, New York.

Walsh, F 2013 AE/12/122 Final Report for Excavations at Servants Hill, Bangor, Co. Down. Final report submitted to the NIEA Belfast.

### *General Archaeology*

Baoill, R Ó 2011 Hidden History Below Our Feet: The Archaeological Story of Belfast. Northern Ireland Environment Agency.

Mallory, J P & McNeill, T E 1991 *The Archaeology of Ulster from Colonisation to Plantation*.

## List of resources/web pages

The IAC blog is at [www.ulsterscotsarchaeologicalproject.blogspot.ie](http://www.ulsterscotsarchaeologicalproject.blogspot.ie)

[www.iac.ie/index.php/news/79-ulster-scots-excavation-blog](http://www.iac.ie/index.php/news/79-ulster-scots-excavation-blog)

To check for Plantation period archaeological sites in your area, go to:

[http://www.doeni.gov.uk/niea/built-home/information/online\\_data/online\\_maps.htm](http://www.doeni.gov.uk/niea/built-home/information/online_data/online_maps.htm)

[www.bbc.co.uk/history/british/plantation](http://www.bbc.co.uk/history/british/plantation)

[www.science.ulster.ac.uk/esri/Excavations-at-Dunluce-Castle.html](http://www.science.ulster.ac.uk/esri/Excavations-at-Dunluce-Castle.html)

[niarchive.org/trails/plantation-rewriting-the-story/#plan](http://niarchive.org/trails/plantation-rewriting-the-story/#plan)

<http://www.honourableirishsociety.org.uk/>

Ulster Scots Trail at [www.ulsterscotstrail.com](http://www.ulsterscotstrail.com)

<http://www.bbc.co.uk/history/british/plantation/companies/lc01.shtml>

The Northern Ireland Environment Agency

<http://www.doeni.gov.uk/niea>

### Mobile Phone Apps

'Walk the Walls' – a guided tour of Derry's Walls, featuring CGI, archive photographs and live footage. Available on Google Play and Apple stores. NIEA.

'Dunluce Castle – Acoustigide' - guided tour of Dunluce Castle featuring 3-D reconstructions. Available on Google Play and Apple stores. NIEA.

SpatialNI – [www.spatialni.gov.uk](http://www.spatialni.gov.uk)

## Family History Research

General Register Office of Northern Ireland

The Ulster Historical Foundation

The Ireland Civil Indexes 1845-1958

Church Records

Public Records Office of Northern Ireland (PRONI)

The North of Ireland Family History Society

Griffith's Valuation 1848–64 -list of occupiers of land, tenement and houses (see [www.askaboutireland.ie](http://www.askaboutireland.ie))

