

Uncovering the history below the

A8 Dual Carriageway

Ballynure in the Bronze Age



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Acknowledgements

The authors would like to thank Lagan Ferroviai Costain JV (LFC) on behalf of Arup and Transport NI for commissioning this book, in particular, Aidan Kearney (LFC) for getting the book to publication and Jim Keyte (Arup) for his advice and guidance throughout. We would like to thank David McClelland for his great illustrations and for bringing this story to life. The information in this book is based on the excavations carried out along the A8 road improvement scheme in 2012 by Northern Archaeological Consultancy Ltd, we would like to thank the archaeological team who excavated the site and uncovered this story of Ballynure's prehistoric past.

First Published in 2015 by Northern Archaeological Consultancy Ltd

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ISBN 978-0-9934560-1-5

Type setting & layout by David McClelland, www.davidcreative.co.uk
Illustrations and cover design by David McClelland, www.davidcreative.co.uk

Printed in Northern Ireland by Nicholson & Bass Ltd.

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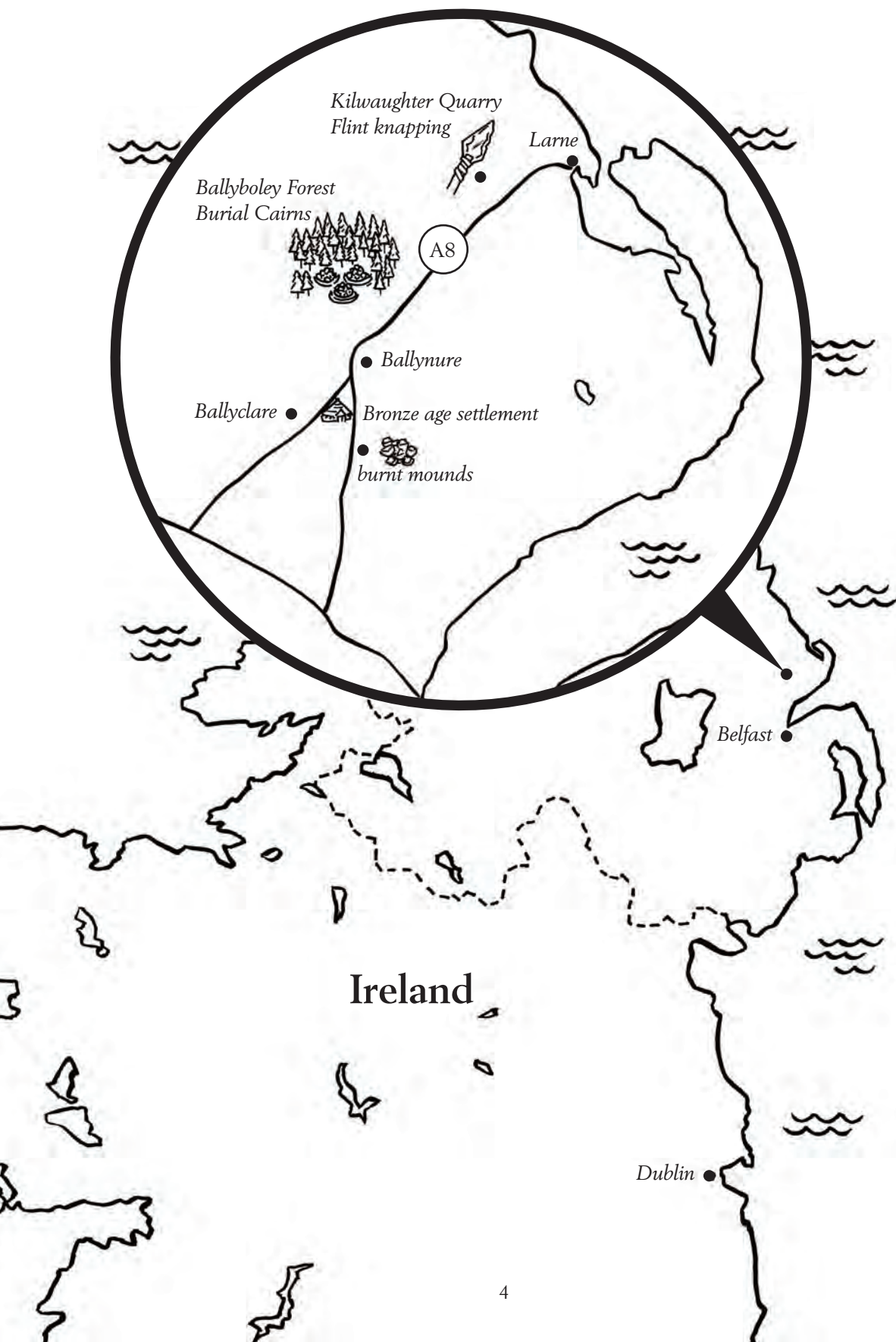
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Introduction

Archaeologists look at how people lived in the past. They dig the ground to find out more about how the land was used and recover any artefacts left behind.

In 2012, archaeologists made some amazing discoveries in Ballynure County Antrim, Northern Ireland. A new dual carriageway road was being built, the A8 road between Ballynure and Larne, when the ground was cleared for the new road, archaeologists discovered a series of holes in the ground which turned out to belong to a set of three houses from the Bronze Age period - they were over 3,500 years old.



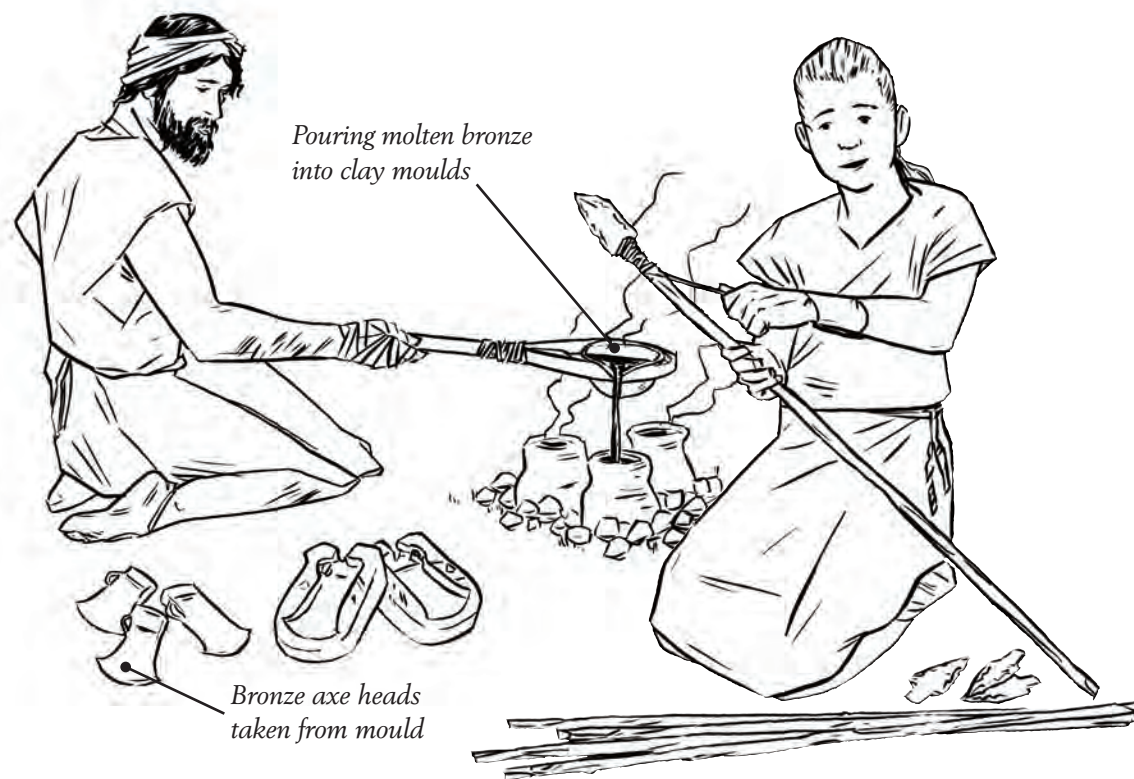
My name is Stevie, and today I went on a school trip with my class to the archaeological excavation, it was only down the road from our school. The archaeologists told us how they found and excavated the archaeology and how they were able to tell a lot about the people that once lived there from the things they found during the excavation.

For our homework the teacher asked us to write a report on what we learnt at the archaeological site. This is my report about the Bronze Age houses and the people that once lived in them.

Welcome to the Bronze Age!

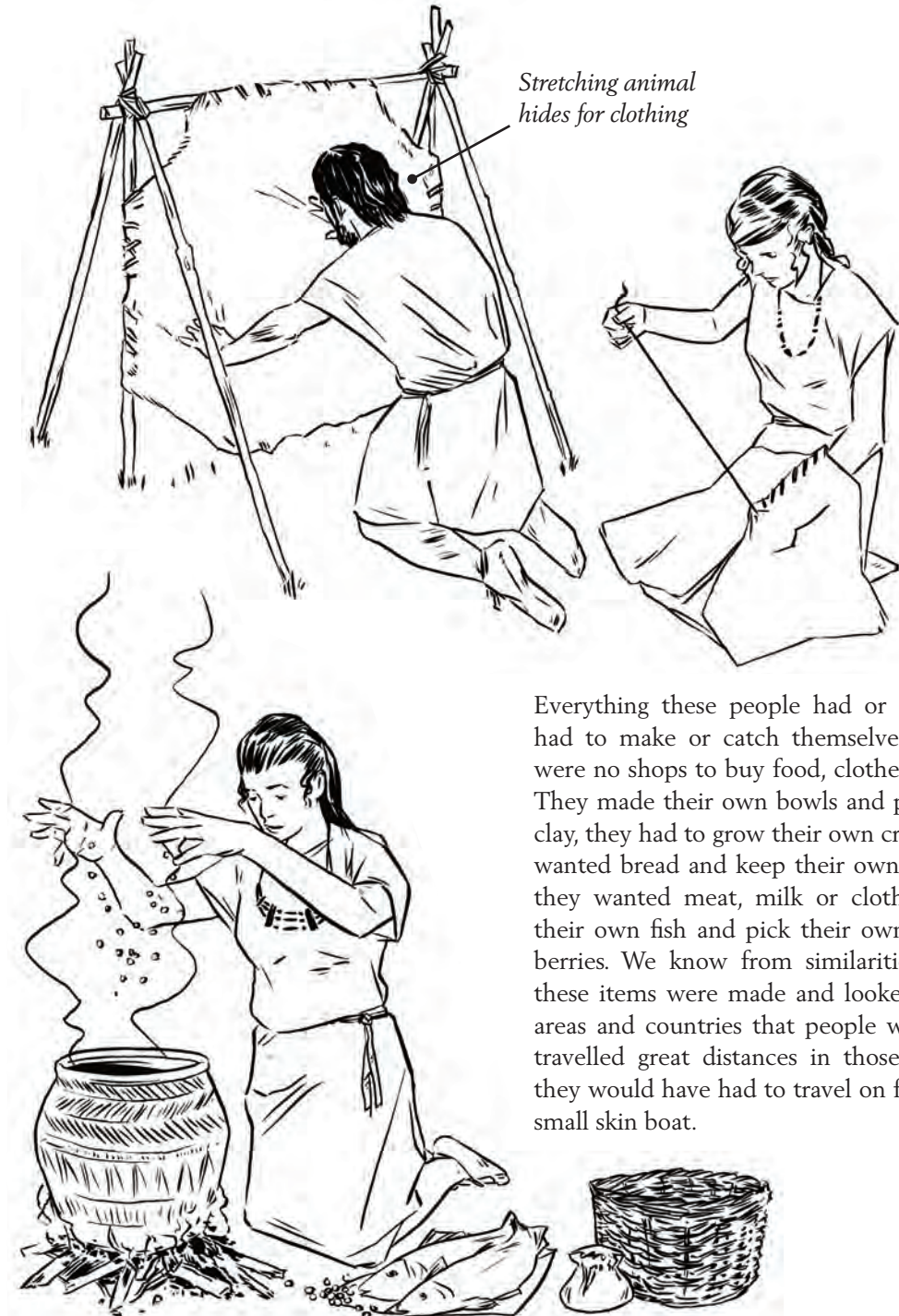
Archaeologists give special names to different times in the past to make it easier to talk about and understand. They call these periods and they are often named after the most common type of technology people would have used at that time.

The Bronze Age period was a time beginning about 4,500 years ago. It's named the Bronze Age because this is when people discovered and started to use metal called bronze, a mixture of copper and tin, which was used to make tools, weapons and jewellery. This period of time lasted for about 1,500 years. Before then people only used stone and animal bones as tools and weapons. They still used these even when they had discovered how to make metal, as it was easier to make everyday items from stone and bone. Metal was used for special items. The site the archaeologists found at Ballynure dates to the middle of this period and is called the Middle Bronze Age.



As the technology changed so did the people. Metal items were still pretty rare and not everyone would have had them, which made them valuable. Those that had metal weapons and jewellery had more power and respect, and they would have become the leaders of the area or tribe. Over time this led to fighting and battles between tribes in different areas as they each wanted the wealth, weapons, land and animals that the others had. Archaeologists believe that bands of these warriors would have travelled the land making temporary campsites as they scouted around looking for tribes to steal from and fight.

They also believe this is the reason that the animals were kept inside the houses, so they couldn't be stolen at night while the family was asleep. The animals were very important to people as they provided food, milk and clothing.



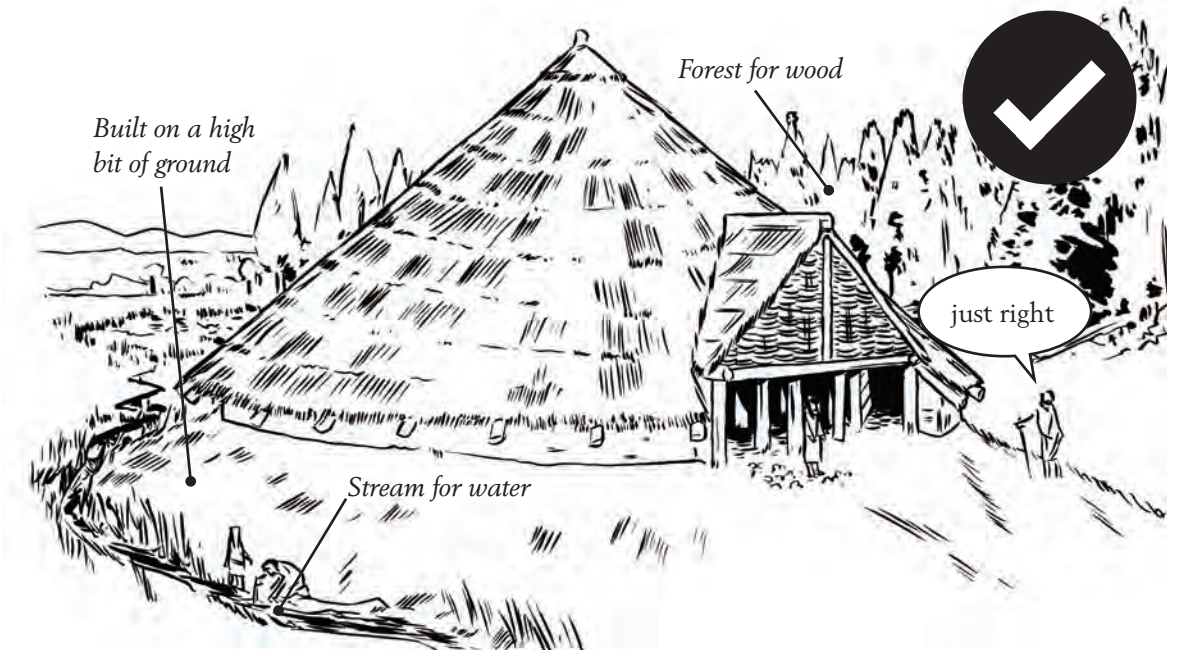
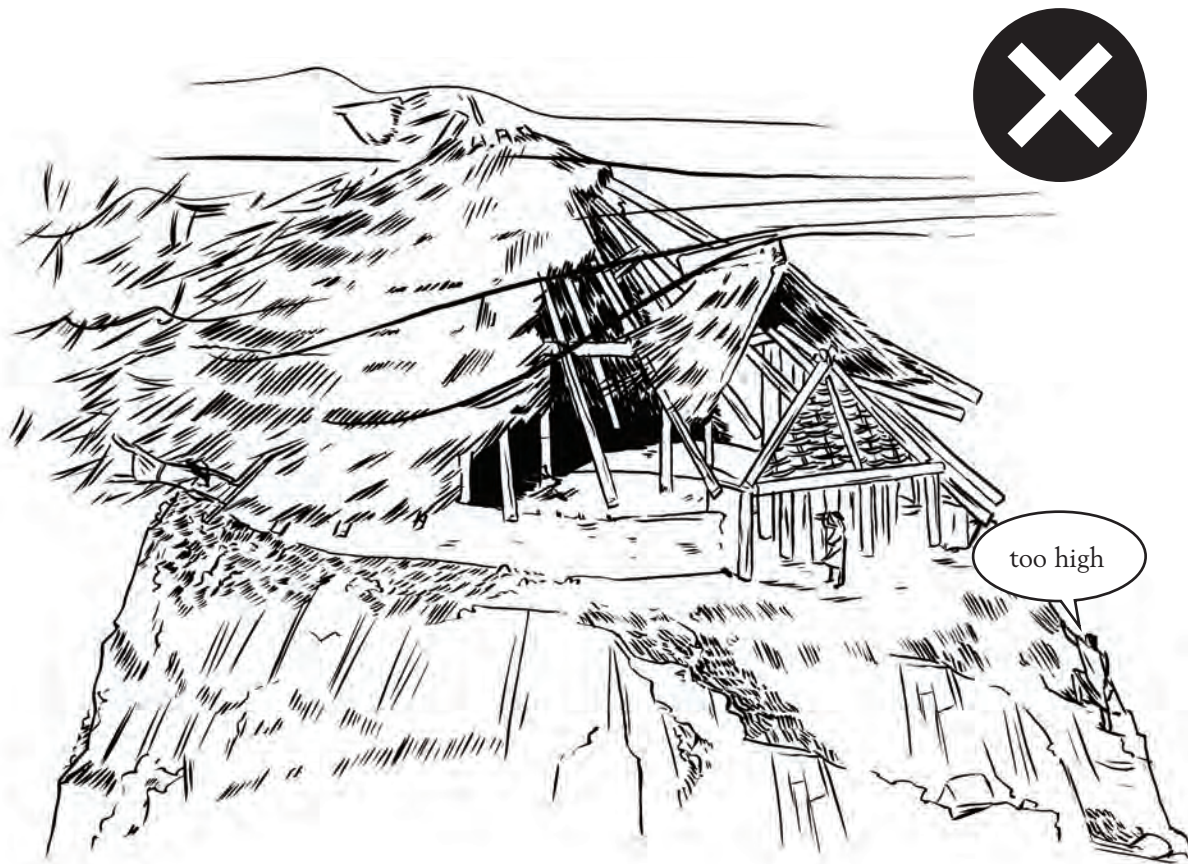
Everything these people had or used, they had to make or catch themselves, as there were no shops to buy food, clothes or plates. They made their own bowls and pots out of clay, they had to grow their own crops if they wanted bread and keep their own animals if they wanted meat, milk or clothing, catch their own fish and pick their own fruit and berries. We know from similarities in how these items were made and looked in other areas and countries that people would have travelled great distances in those days, but they would have had to travel on foot or in a small skin boat.

Choose your site

The settlement site found at Ballynure was 3,500 years old. Imagine what the area would have looked like at that time- it would have been very different from how it looks today. There would be no stone buildings, no roads or footpaths, only green grass, trees, rivers and streams for as far as the eye could see. There were fewer people around in the Bronze Age and fewer houses, so when it came to building your house you could choose the best location.

You need to think about three things when picking where to build your house:

1. **Land** – you need somewhere that's not too dry and not too wet, that you can defend- you want to be up high enough to see attackers coming, but not so high up that you have to climb a long way every time you want to go home.
2. **Water** – you need to be close to a source of clean, fresh water (such as a river, stream or spring), this is extremely important as people, animals and crops need water to survive. You will also need to wash yourself and your clothes, and be able to use your boat on rivers to travel and go fishing.
3. **Wood** – you will need wood to build your house, workshop, pens for your animals and to burn in fires to keep you warm and cook your food.



The house at Ballynure was built in a high bit of ground surrounded by a boggy area on three sides. The boggy land is quite wet and hard for people to cross, which means that you could only get to the house from one side, so it would be defensible as you would see anyone coming to the house and could be ready in case they attacked. The Ballynure house was close to a forest so there was plenty of wood to build your house and you wouldn't have to carry it too far. The house was also built close to a stream, there was fresh, clean water available to drink.

Build Your House

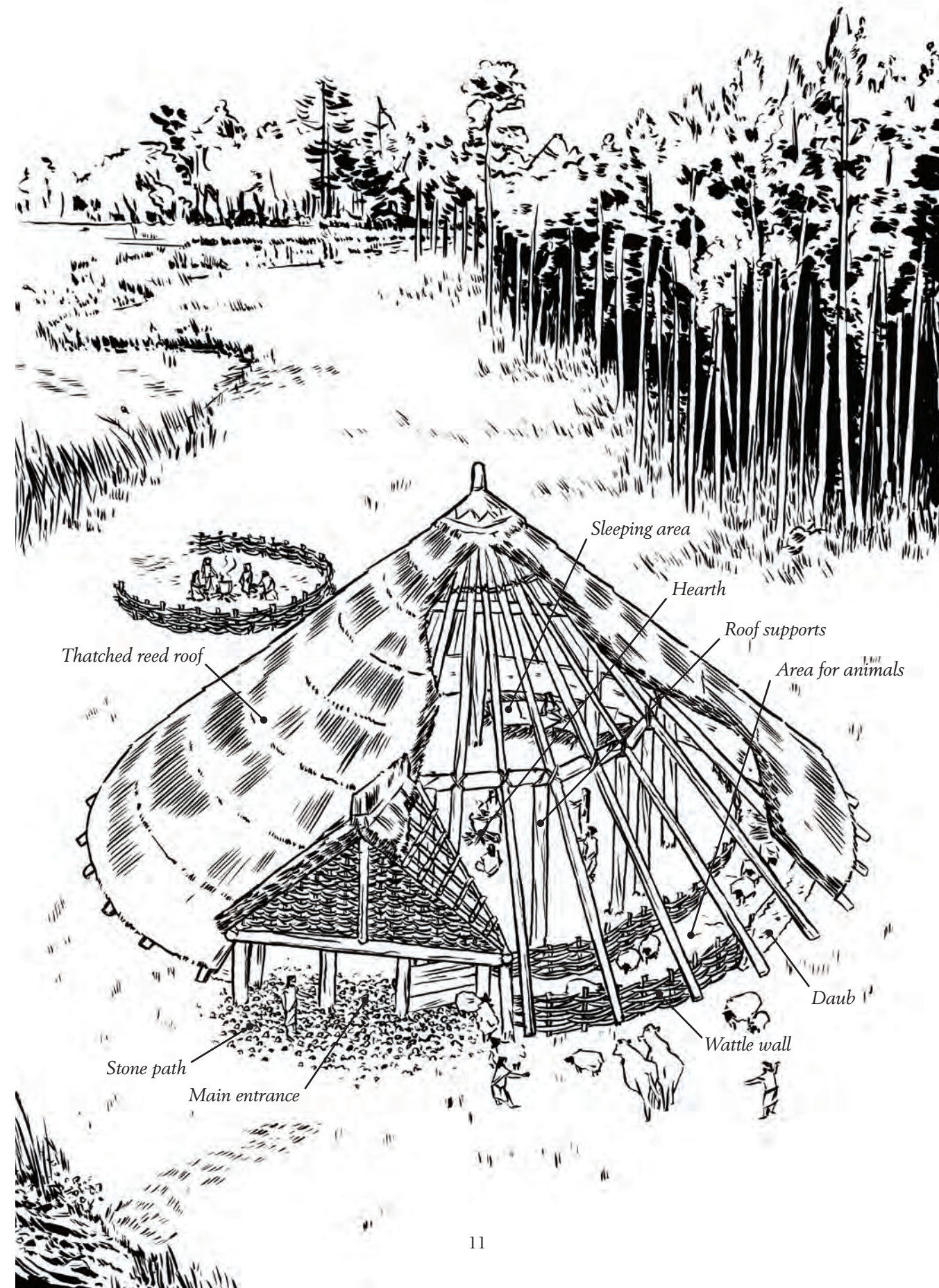
Once the people had picked a good spot it was time to build their house. A house of this size would have used a lot of different materials; wood for the building, bundles of reeds for thatch for the roof and clay to cover the walls.

When people were building their houses during the Bronze Age they did not have the same machines that we have today. All of the digging would have been done by hand using tools like wooden spades and deer antlers used as picks and hammers, and trees would have been cut down using bronze or stone axes. It would have taken a lot of effort and people to help build a single house.

Firstly the supports for the roof were put up. A ring of holes were dug and large wooden posts were put in them, stones and soil were packed around to keep the posts steady. Next the wall. About 2m away from the roof supports a ring of smaller posts, or stakes, were pushed into the ground. Then longer, thinner pieces of wood were woven between them to create a wall. This is known as wattle. A gap was left on the southeast side of the house and larger posts were put up to form a doorway. Then the roof had to go on. Longer pieces of wood were used to create a conical roof. The roof was then thatched using bundles of reeds from the shores of the nearby lake. These houses didn't have a chimney and would have been very smoky inside. Finally a mixture of clay, animal poo and straw, known as daub, was put on the wattle walls to keep out the wind and the rain. Small stones were pushed into the ground outside the door to create a path.

At Ballynure there were at least three houses so a lot of wood and reeds would need to have been cut and gathered to build all the homes.

Hundreds of stakeholes were found inside the large house at Ballynure. These stakeholes mark where walls would have been and show how the house was divided up into different areas. These areas would have had different purposes. Some, were for sleeping and others for working. Although they served the same purpose as the rooms in modern houses they would have been quite different from what we know today, with everybody sleeping and working together in the one area. People wouldn't have had their own bedroom and there were certainly no bathrooms inside the house.



Who lived in a house like this?

A house of this size would have housed an extended family as well as their animals. Mums, dads, children, aunts, uncles, cousins and grandparents would all have lived in the one house. The animals, including the cows and sheep, would have been brought into the house at night to keep them safe. Archaeologists believe that at Ballynure they were kept in the area between the outer wall and the posts that supported the roof.

We can't say exactly what people would have done inside the house, but we do know that there must have been separate areas for sleeping and working. A hearth was found in the centre of the building and people would have gathered around the fire at night for light and heat. As there was no chimney it would have been quite smoky inside the house, though this smoke would have helped to keep away insects.

Some cooking would have been carried out around the fire, but we believe that the people were also cooking at a site called a burnt mound, which the archaeologists discovered just down the road.

Archaeologists found flint artefacts and sherds of pottery just outside the door of the house. This was the peoples' rubbish that was just swept out of the door. There were no rubbish bins like we have today. When a lot of rubbish gathered up it was usually dumped in piles known as middens. These middens were located away from the main settlement. It is possible people were even throwing their rubbish into the lake.

It wasn't just houses in the settlement. Around the back of the large roundhouse archaeologists uncovered another smaller building. This building had simple stake walls and no roof. The remains of a hearth was uncovered within the centre of this small building. Archaeologists think that this was probably a workshop, where pottery and tools were being made.

During the Bronze Age adults didn't go out to the type of jobs we have today and children didn't go to school. Everybody would have worked in and around the settlement. People would have carried out different jobs, some made pots or stone tools while others hunted, fished or farmed. Children would have helped with these tasks and from a young age they would be learning how to hunt, fish, make pottery, arrowheads, clothing, how to look after animals and learn how to farm.

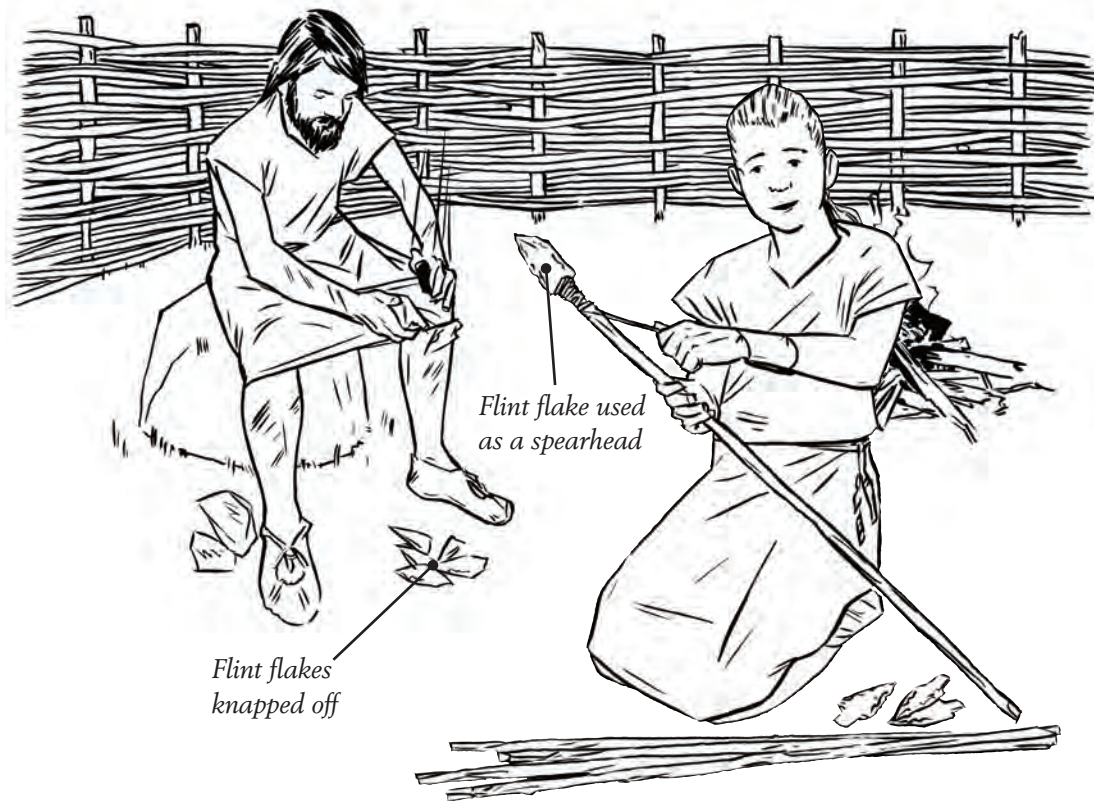


Tools & Technology

People in the Bronze Age didn't have the computers, phones and technology that we have today. Although there was metal, this was rare and expensive, and so most people still used tools made from stone and simple clay pots.

Tools were usually made from a type of stone called flint. Flint is special because when it is broken it has a very sharp edge that can be used for cutting. In order to make flint tools people used a technique known as knapping. When knapping they took a large piece of flint and then hit it with another stone. This would cause a piece of sharp flint, known as a flake, to come off. This flake could then be used as a knife or worked into an arrowhead, scraper or even a spearhead.

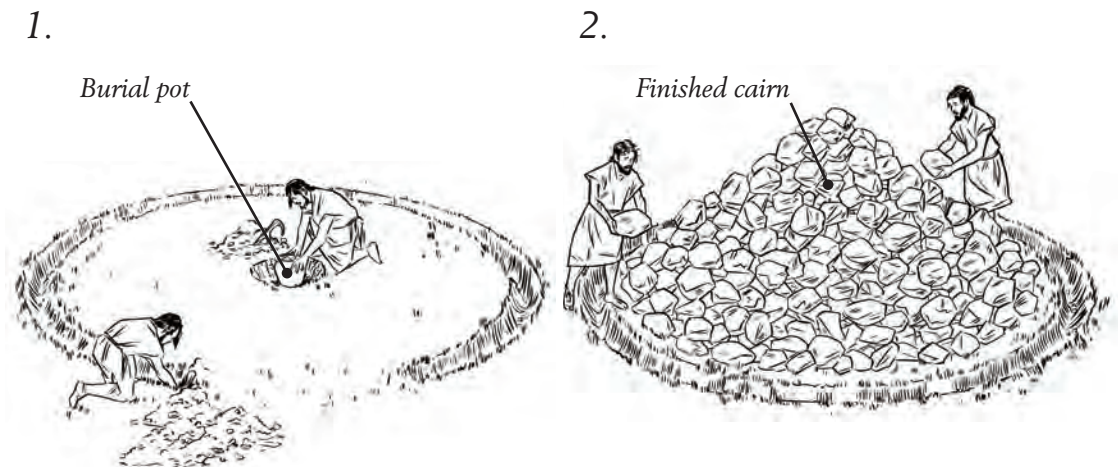
Although a few flint tools were discovered at Ballynure there were no large pieces of flint found. Archaeologists have discovered a site at Kilwaughter, just outside Larne, where thousands of flint tools were being produced. It is likely that the people at Ballynure would have traded with the people at Kilwaughter.



Pots would have been made from clay dug from the banks of the lake. The clay would have been rolled out into long sausages and then coiled up to make a pot. Once the pot was the right size the sides were smoothed down and the pot was then left to dry in the sun. Once the pot had dried out it was fired in a kiln. Sometimes decoration was added using sticks, string and even bones. These pots were very important in the Bronze Age and although they were used in houses, like the ones at Ballynure, we know that they were also used when somebody died.



During the Bronze Age when somebody died they were usually cremated and their remains, the burnt bones, were placed inside a pot or urn. This pot was then buried in a pit and covered with a mound of stones known as a cairn. A number of these Bronze Age burial cairns can be found in Ballyboley Forest just north of Ballynure.



How do you cook without a cooker?

Just down the road from the houses at Ballynure was a large Bronze Age cooking site known as a burnt mound. Archaeologists call these sites burnt mounds because when they find them in the ground they appear as large piles of burnt stones and charcoal. Some of these areas were used for many years and some of the mounds can be up to 2m deep and 30m long. There were three of these burnt mounds near Ballynure and archaeologists believe that they had been used for hundreds of years.

How they worked

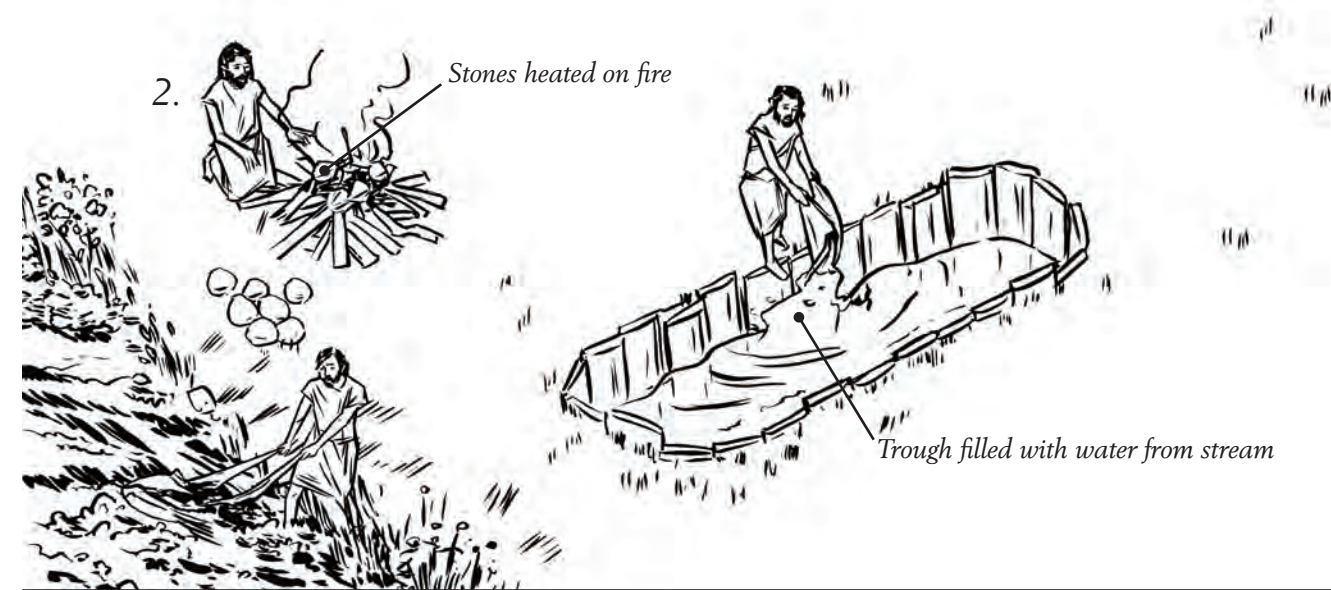
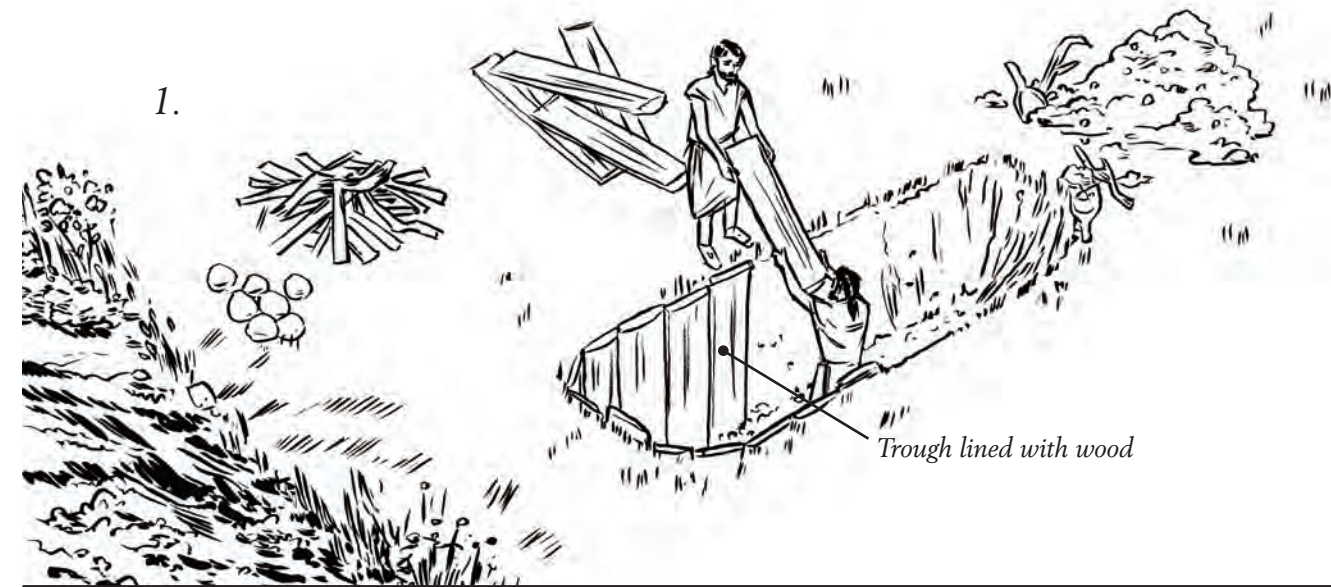
These burnt mounds are always found close to water. They worked by digging a large pit, known as a trough. Sometimes the trough was lined with wood or clay. Once the trough was constructed it was filled with water. A large fire was built nearby and stones were heated up. Once hot, the stones were placed in the trough and used to heat up the water.

Archaeologists have many different ideas for how these burnt mounds were used, including brewing beer and being used for a hot bath!! The most popular idea is that they were used for cooking, like a big saucepan full of hot water.

What they ate

We already know that the people at Ballynure kept animals. We don't know exactly what type of animals they had as the archaeologists didn't find any bones, but bones found on similar sites elsewhere show that cows, sheep, goats and pigs were the most common animals kept at this time. The animals would have provided the people not only with meat but milk, wool and their skins (or hides) would have been used to make clothes and shoes. These farmers would have had small fields and grown grain, such as barley, to make flour so that they could make bread.

Although the people were farmers, they would still have used the natural resources available to them. They would have fished in the lake and caught water birds like ducks and geese. In the forests around them they would probably have hunted deer and wild pigs and gathered nuts and berries when they were in season.



Back to the future...

Writing hadn't been developed in Ireland at this time, and so everything we know from this period is from archaeological excavations or from stories written hundreds of years later. The settlement at Ballynure is an important discovery and allows us to further understand how people lived 3,500 years ago during the Bronze Age.

Do you think the Bronze Age people were very different from you? Think of the type of house you live in, do you have lots of different rooms and a bathroom? Do you think you could have lived in one room house with your entire family, all your farm animals and have no inside toilet?

You might enjoy not having to go to school everyday, but instead you would have to work, learning to do jobs such as cooking, making tools and pots, hunting, fishing and farming and probably learn how to fight so you could help to protect your home and animals if someone tried to steal them. It would have been a very tough life.



Imagine you were camping in the middle of a big forest, with no one else around for miles, no electricity, no phones, TV, computers. You have to make your own fire, catch and cook your own dinner using tools you made from wood and stones – this would give you a little idea of how the people from the Ballynure house would have lived 3,500 years ago.



Glossary

Archaeologist

Someone who studies archaeology

Archaeology

The study of long ago remains of people, their buildings, possessions and tools

Artefact

Things from the past found and studied by people today

Bronze

A metal made by melting a mixture of tin and copper

Bronze Age

The period of time in the past when people started to make tools and weapons from bronze

Burnt Mound

An archaeological site made up of a pile of burnt stones that had been heated in a fire and then placed in a pit of water to heat the water

Cairn

A pile of stones that cover a grave

Cremated

Burnt by fire

Daub

A mixture of mud, animal poo, animal hair and straw, used to cover the walls of a house to keep it dry and warm

Evidence

Proof that something is real or that something has happened

Flint

A hard stone used to make tools in prehistoric times. It can be knapped to shape it and give it a sharp edge

Kiln

A hot oven or fire for turning clay into pottery

Knapping

Hitting bits off a piece of flint or other stone to make a tool

Midden

A rubbish dump

Posthole

A hole, larger than 10cm in diameter, left in the ground by a wooden post

Roundhouse

A circular house made from wooden posts, wicker walls and a thatched roof, most commonly built during the Bronze Age period

Settlement

A group of houses

Stakehole

A small hole, less than 10cm in diameter, left in the ground by a wooden post

Thatched roof

A roof made from reeds or straw

Trough

A large hole in the ground, sometimes lined with wooden planks, and filled with water, they are found next to burnt mounds

Wattle

A wall made from thin interwoven branches that are placed between the large wooden posts of a house and covered in daub

Bronze Age: 2500 BC to 700 BC

It is from this period that we start to see evidence of trade with other parts of Europe, as new skills are acquired and techniques and designs are similar to artefacts from other parts of Britain and Europe. During this period people discovered how to create Bronze by mining for copper and tin, melting them and adding the two metals together. Bronze was used to make weapons such as axes and arrowheads, tools and jewellery. People built and lived in round houses made from wooden logs, branches and reeds. Their entire extended family, including their animals would have lived in the round houses.

Archaeological Timeline

