

#### The Neolithic landscape

The Neolithic was the first period during which human activity in Ireland began to substantially alter the landscape. Before this time, forest covered the majority of the island, although it was less dense in upland areas. These forests were composed mainly of mixed deciduous woodland (i.e. trees that shed their leaves), including oak, elm, alder, ash, and pine, with small hazel and birch as well. In the lowest part of the river valleys, along the riverbanks, willow and hazel would also have grown.

When Neolithic farmers arrived in Ireland they had to make space for the growing of crops, and therefore had to clear forest and open the landscape. This resulted in widespread deforestation in the areas surrounding settlements, although the wider landscape probably remained heavily forested. The polished stone axes used by Neolithic communities were useful for clearing these large areas of forest.

The wood from the cleared trees was not wasted – it would have been stockpiled and dried to be used as **fuel** for fires, which were essential for cooking, heat and light. This timber was also used to build large **houses** and fences to organise the **field systems**. Fences and fields were important for keeping livestock away from trampling and eating crops. Fields would also help to organise the land, as well as marking the property of one family or community.

## How do we know what the landscape was like?

The pollen that is produced by trees and plants is present in the air, and over time falls to the ground. Some of this pollen gets trapped in lakes and builds up in layers, staying in these layers throughout time. Specialists who study pollen can examine these layers and analyse the different types of pollen, which shows them what types of plants were in the landscape at different times. Some plants grow in open conditions and are therefore good indicators that the land was cleared.

# How did people navigate the landscape?

Because the landscape was heavily forested it would not have been straightforward to find your way around. Instead, natural navigation routes, such as river valleys would have been used. Neolithic people would have travelled alongside these rivers when moving around the landscape, and resources like flint and clay would also have been found here. We know that people in the Neolithic used dugout canoes (a canoe made from a hollowed-out log), so they would also have travelled on the river itself.

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As well as the barriers posed by the forested landscape, there were also areas of marshy, boggy ground which were difficult to navigate. The Neolithic communities figured out a way to traverse these landscapes by building trackways. These trackways passed through areas of bog, and were constructed from either split logs or planks, which were held in position by wooden pegs.



#### Collections in focus

Although a few small stone and flint axes had been in use during the Mesolithic in Ireland, it was during the Neolithic period that stone axes became common. They were an important tool for clearing the forest to provide space for settlements, fields and timber for building. The polished stone axe was particularly prevalent as it was more durable than flint and had a fine cutting edge. These were made by working a 'rough-out' in the general shape of the axe, and then polishing it probably using sand and water by grinding the surface until smooth.





Rough-out (top) and finished polished stone axe (bottom). www.nmni.com/learn

#### Were different communities connected?

Although Neolithic communities in Britain, Ireland and Continental Europe were separated by the sea this doesn't mean that they weren't connected. Our evidence for these connections comes from similarities in artefacts and structures, and raw materials from one location appearing in another.



#### Porcellanite axes

Porcellanite is a type of rock which can only be found in outcrops on Rathlin Island and Tievebulliagh, both in Co. Antrim. Porcellanite axes have appeared as far as Cork, Kent and even the Shetland Islands.

#### Greenstone axes

Axes made from a type of greenstone which can be found in Langdale, Cumbria, England, have been recovered in Ireland.

#### **Pitchstone**

This glassy, volcanic rock can be found on the Isle of Arran, Scotland. Pitchstone has been found at Neolithic sites in Britain and Ireland.

#### Jadeite axes

At least four axes made from the beautiful green, speckled jadeite have been found in Ireland. This is significant because the source of this rock is in the Italian Alps, about 1600km from Ireland. These axes were probably high status objects, traded across very large distances and probably through numerous communities.

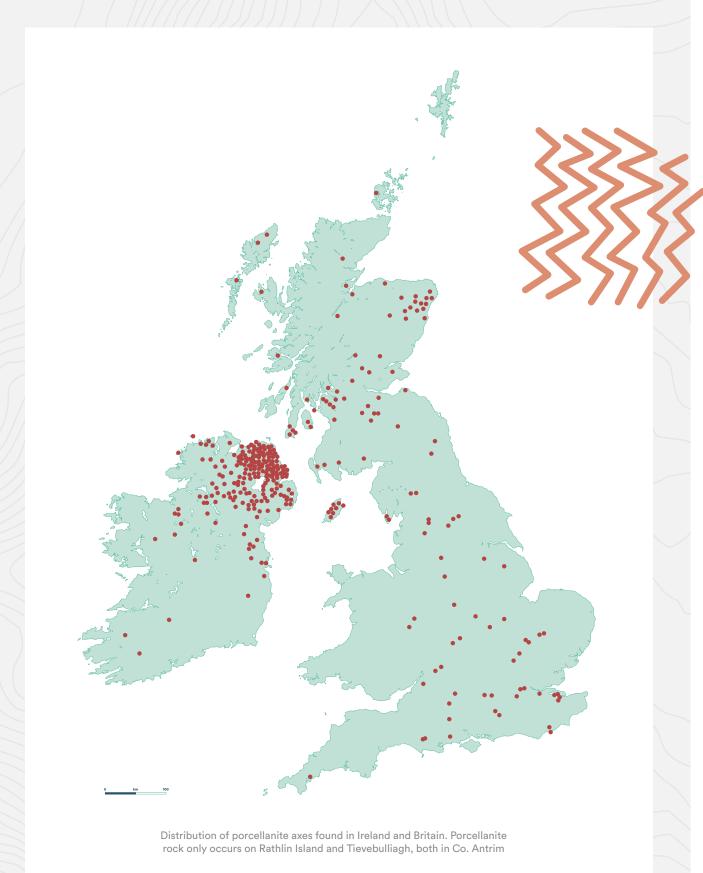
#### **Portal tombs**

The similarities between the portal tombs found in Ireland and those found in Brittany, France, are striking. It is believed that contact with French communities may have inspired Neolithic builders to erect these monuments.

#### Passage tombs

Irish passage tombs bear a strong resemblance to similar structures in Orkney, and similar rock art is present on the Orkney tombs. It seems as though the builders of the Orkney passage tombs were inspired by the Irish examples. Whether they had seen them themselves, or perhaps heard descriptions from Irish communities is not clear.





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# Rate your school... ... as an Ancient Irish settlement

#### Your school review

Today we choose to live in places that have the resources we need – roads, shops, electricity, sports fields, schools, work places.

- Think about the resources an Ancient Irish settlement would need... good farm land, fresh water, protection, access to flint, copper, gold, transport links – river, lake, coastal sea routes, fuel supply etc.
- Look at a map of where your school is located. Have a class discussion about how good the school's location would have been in ancient times.
- Compare with the resources we want and need today.
- Is the school well located for twentyfirst century living, and why?

#### **Further discussion**

— What resources do the pupils think people in 50 years will need around them?

