

ANIMAL LIFE

Mesolithic people shared the landscape with a variety of animals, many of them familiar to us today. Following the end of the Ice Age, large mammals, such as woolly rhinoceros and mammoth, both well adapted to cold environments, had become extinct. As the Mesolithic forests developed, other animals such as horse and reindeer moved elsewhere to more open environments. Some giant creatures such as Giant Deer and Irish Elk survived into the early part of the Mesolithic before these also died out.

Aurochs (Wild Cattle), massive compared to modern breeds, were found throughout the Mesolithic until domestication in the Neolithic, and other herbivores such as red and roe deer were common. A range of smaller mammals and birds also lived in the Mesolithic forests, including wild boar and hare, and along the coast fish, shell-fish and seabirds would have been widely found.

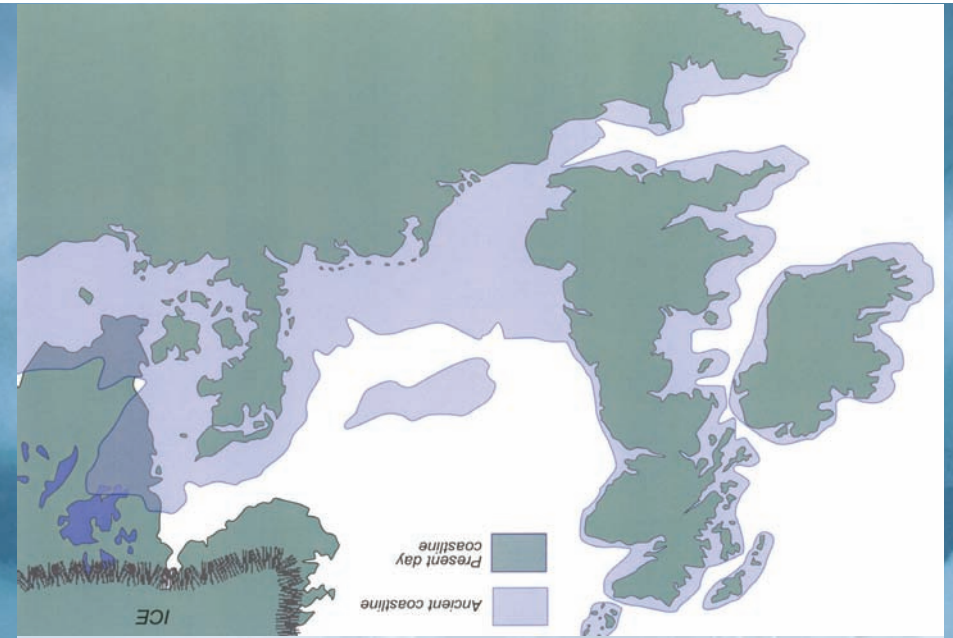
Other than man the natural predators of the landscape were wolves and brown bears. We know that the dog was domesticated in the Mesolithic period but archaeological evidence for them is rare.

THE MESOLITHIC ENVIRONMENT

The study of the Mesolithic environment is made possible by the analysis of ancient pollen, seeds and insect remains. These sorts of remains survive in waterlogged conditions such as in sediments at the bottom of lakes or within peat deposits.

When the ice retreated the landscape would have been very open with birch trees and some pine establishing themselves, and a climate drier than it is today but a little cooler. Temperatures increased rapidly and gradually more varied tree and plant species colonised, so that by about 8000 BC mature forest covered most of Britain.

By about the time that Britain became an island the climate was wetter and warmer and a mixed deciduous forest including oak, elm, lime and alder dominated lowland areas, while a more open upland hazel and pine forest covered the less fertile upland soils. The forest would have offered natural food sources such as berries, nuts, roots and tubers as well as providing shelter for abundant animal life.



THE END OF THE ICE AGE

Up until about 12,000 years ago most of Britain would have been buried beneath vast ice sheets. When the Ice Age ended these ice sheets retreated leaving a tundra landscape, a bit like the Russian steppes. At this time people probably hadn't settled in the area but large animals like woolly mammoth and rhinoceros would have grazed the tundra. The fossil remains of these sorts of creatures are sometimes found on local beaches.

At the beginning of the Mesolithic, Britain was still connected to the continent by a wide land bridge because sea level was very low, with the water frozen into glaciers further north. This meant that our ancestors would have been able to walk from Scarborough to Copenhagen. The continued melting of the ice led to a rise in sea level throughout the period leading to the breach of the land bridge at around 6500 BC, creating the English Channel.

THE NORTH EAST YORKSHIRE MESOLITHIC PROJECT

The Mesolithic period, also known as the Middle Stone Age, lasted for over 6000 years from around 10,000 BC to around 4000 BC. It began at the end of the last Ice Age (at the end of the Palaeolithic or Old Stone Age) and it continued until the first appearance of farming in the Neolithic (New Stone Age).

Despite being such a long period, we know relatively little about it. The North York Moors National Park and Tees Archaeology have teamed up to find out more and have set up a three year project with funding from English Heritage.

This leaflet will explain what life was like in the Mesolithic period and will also act as a guide to the sorts of archaeological remains that you might find on the North York Moors.

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10,000 years BC
 North East Yorkshire in the Mesolithic

HUNTING AND GATHERING

The lifestyle of Mesolithic populations was linked closely to the environment around them. Abundant plant and animal resources were exploited to provide food, clothing and shelter. This way of life is known as hunting and gathering and can still be found in some traditional societies across the world and until recently was practised by native North Americans and Australian aboriginal groups.

Mesolithic hunter-gatherers moved around the landscape to make the most of the available resources. They would travel between different areas to exploit plants or animals as they became available at different times of the year. There is some evidence also that in the late Mesolithic fire was used to create and maintain small clearings within the forest which would attract animals and make them easier to hunt.

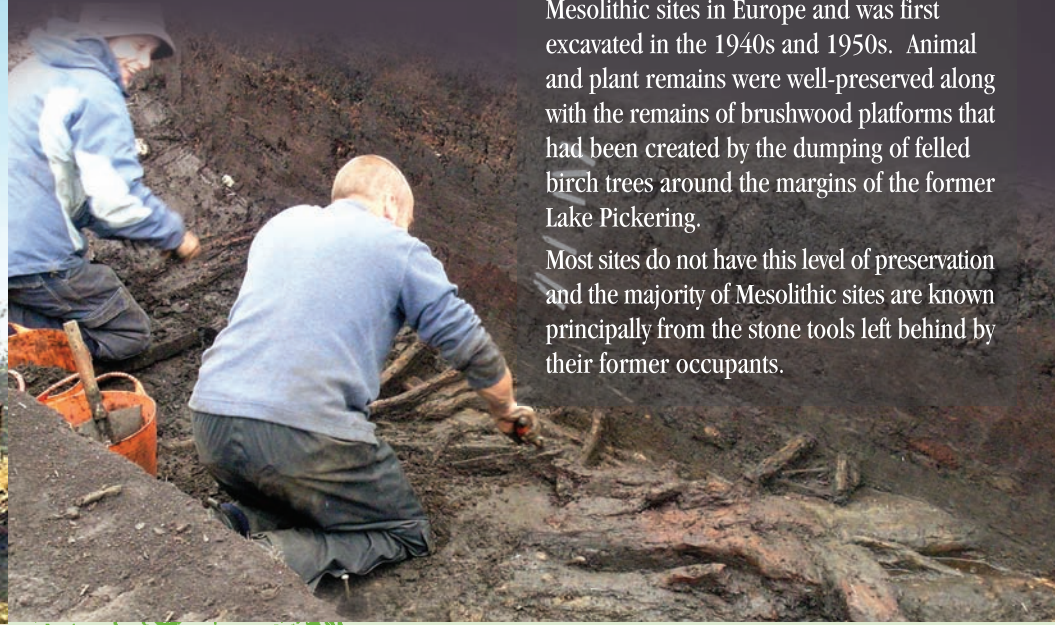
Groups of people may have established base camps which they occupied for extended periods of time. From here they might travel to intercept migrating herds of deer or aurochs, visit the coast to collect mussels and limpets or harvest nuts and berries from nearby woodlands. These base camps were likely to be near a good water supply and would allow easy access to a variety of resources. Other occupation sites may have been more temporary and used for only short periods of time or by small numbers of people in order to exploit particular resources.



Photo © Clive Waddington

ARCHAEOLOGICAL REMAINS

Archaeological remains are rare from the Mesolithic period. Even busy base camps may have left little trace behind them, structures such as shelters are likely to have been easily transportable and a few stake holes may be the only evidence for them. Even hearths and camp fires may have left few physical traces. Some hearths have been excavated recently in the Pennines, however, and dated to the Mesolithic. Very rarely the site of a house or shelter is found such as the one excavated at Howick on the Northumberland coast.



Waterlogged deposits have a much higher potential for preservation. Star Carr in the Vale of Pickering is one of the most important Mesolithic sites in Europe and was first excavated in the 1940s and 1950s. Animal and plant remains were well-preserved along with the remains of brushwood platforms that had been created by the dumping of felled birch trees around the margins of the former Lake Pickering.

Most sites do not have this level of preservation and the majority of Mesolithic sites are known principally from the stone tools left behind by their former occupants.

FLINT TOOLS

Mesolithic people used flint to manufacture stone tools. These tools and the waste products from their manufacture are often all that survives of hunter-gatherer sites.

Flint is a locally available raw material. It can be found as small pebbles or nodules transported by the glaciers. In North East Yorkshire the most reliable sources of flints are the local beaches.

Flint is a very hard material but it is also brittle. When it is struck it fractures and with some practice small flakes and blades can be removed for making into tools such as scrapers.

When a pebble has been knapped you can see the scars left by the flakes and blades on its outer surface.



Flint Core



Flint Scraper

MICROLITHS

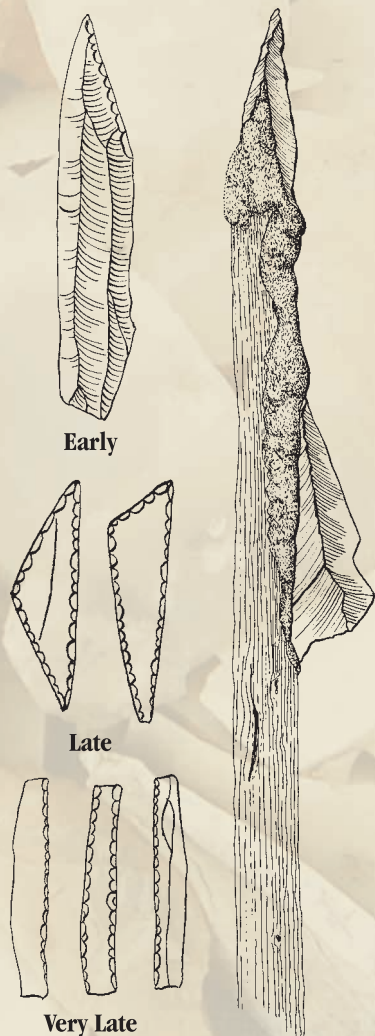
One of the most common Mesolithic tool types was the microlith. The term is derived from Latin and means 'small stone'. These were often called 'Pygmy flints' by the Victorians because of their small size.

Microliths are made from small sections of flint blades, shaped by chipping, or retouch, along one or more of their edges. They take a variety of shapes and sizes - the simplest are blunted at an angle across one end to create a point. Others are shaped into triangles, crescents or trapezes.

Earlier microliths tend to be larger and based on broad blades, often between 2 and 4 centimetres in length. Later microliths are smaller and usually more geometric in shape. In the very late Mesolithic a type called a 'rod' was introduced. These tiny blades are blunted along one or both edges and are often extremely small.

Microliths were used to tip arrows and several may have been used together on the same arrow. There are surviving examples from Scandinavian bogs which show how they were hafted. Microliths may also have been used together as blades for sickles and other tools.

Microliths were replaced by leaf-shaped arrowheads in the Neolithic period.



OTHER TYPES OF TOOLS

Flint tools were also used for cutting, chopping, scraping, engraving and piercing.

Any sharp-edged flake would suffice for a handy knife. For other tasks flints would be shaped by retouch to suit the purpose. Scrapers were an everyday item which can also be found on the Moors. Mesolithic scrapers normally take the form of a long blade or elongated flake with retouch concentrated along one end.

A type of flint axe called a 'tranchet axe' was used in the Mesolithic. These were pick-shaped.

Tools were also made from antler. Barbed points were common in the early Mesolithic but rarely survive other than in exceptional circumstances. Over 200 were recovered from the waterlogged deposits at Star Carr. They may have been used as spearheads or harpoons. Antler may also have been used to create mattocks, picks and other digging equipment for use in foraging.



Flint Knife



Barbed Point

THE END OF THE MESOLITHIC

The Mesolithic period ended as farming spread across Europe from the east in the Neolithic (or New Stone Age). However, as Britain was an island, it took longer for farming to appear.

Cereal crops such as wheat and barley were introduced and animals such as cattle, pig and sheep began to be domesticated. These new subsistence technologies required a more settled way of life than in the Mesolithic, although people continued to supplement their diet by hunting wild animals. Monuments associated with burial and ritual, such as stone circles and chambered tombs, were built for the first time in the Neolithic, and people started to make and use pottery.

It is not clear whether the Mesolithic ended with an influx of people who soon replaced the indigenous hunter-gatherers or with the introduction of new ideas and technologies which were gradually adopted by the local population. In either case the Mesolithic was one of the most long-lived periods, lasting for over 6000 years, as long as all the successive periods of prehistory and history put together.

