Human acclimatisation to a changing world: the arrival, adaptation and spread of the Mesolithic

The Mesolithic followed the Upper Palaeolithic. It began around 11,700 - 11,450 years ago as it spread from the south to the north of Europe and continued until the Neolithic first appeared near the Atlantic coast four and a half millennia later. The Mesolithic culture developed after a very cold period, when the growing ice caps forced people to move south. As the climate warmed, early Europeans grew in numbers and spread back to all corners of the continent.

The Mesolithic culture is defined by a tool kit where small flint implements were used in preference to the ‘Long Blades’ of their predecessors. These new types of blades were better suited to the changing environment that the hunter gatherer communities had to deal with over the period that followed.

The Early Mesolithic began c. 9,700 - 9,450 BC with a limited number of culturally and technologically different hunter gatherer communities. The Maglamosian followed herds of reindeer across the sparsely vegetated north European plain. This included the North Sea and Great Britain where their tools incorporated heavy Tranchet axes. The Sauveterrain, who could be found from northern Spain, through France and into the UK preferred smaller finely prepared microliths. The Azilian, who were dominant in northern Spain and the western side of the Alps had a more robust tool kit and they were artistic, producing rock paintings and decorated pebbles.

With the melting of the ice caps the sea level rose, the environment continued to improve and Western Europe became dominated by deciduous forests. Mesolithic territories on the continental shelf drowned, Great Britain became separated from mainland Europe and groups began to live in more tightly defined territories. Despite the flooding, recent discoveries underwater have indicated that there were interactions across Europe until Britain the final severance. Advanced wood working technology, DNA evidence and a range of stone tool types from southern England demonstrate a wide trade network.

The end of the Mesolithic and beginning of the Neolithic occurred with the introduction of farming; when people became settled in fixed locations; when social systems became more complex and when substantial monuments were being erected and when flint tools became much exquisitely refined. These are common factors are steadily introduced across the Atlantic facing nations as people traded and communicated along the coastline. The discovery of DNA from wheat, dated to 6,000 BC at Bouldnor Cliff, off the south coast of England, demonstrates long distance trade across Europe and high levels of social organisation 2,000 years before the Neolithic period is otherwise known to have arrived in the UK.

As the sea levels rose, the Later Mesolithic, adapted to the changes by becoming more sedentary and taking to the water.

The Late Mesolithic cultures that developed in Spain and France around 6,500 BC saw a diversification of technologies in different regions. A similar pattern occurred in Great Britain but cultural characteristics varied. There are very few sites with the distinct trapeze style of microliths in Britain and burial practices became very rare, while they remained widespread on the continent.

The Late Mesolithic worked wood that included advanced working techniques dated to 6,000 BC over 2,000 years ahead of its time for the UK. This was a technology that was more closely associated with the South of France or Spain.

The Late Mesolithic burials showed high levels of social structure long before the Neolithic arrived. Burial of Téviec - burial D. (France).

Trapeze style microliths became dominant in the last two thousand years of the Mesolithic.

The settlement that characterised the Neolithic enabled skilled craftsmen to produce exquisite flint arrowheads.

Late Neolithic decorated pebble. Mas d’Azil cave (France).