

The mesolithic era essay



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The last Ice Age ended 10, 000 radiocarbon years ago and saw the beginning of the Mesolithic period (Mithen, 1999). In Europe, the Mesolithic era was a transitional time between the ice ages and post-glacial environments and hunter-gatherers and farming societies. Europe entered into a period of intense climatic change; temperatures increased, ice-sheets retreated and sea levels rose.

Much of the European landscape changed from periglacial tundra to deciduous woodland. The proliferation of plant-life, and subsequently wildlife, forced the people of the Mesolithic to adapt to this new and unpredictable environment. Archaeological investigation shows the development and adaptations that occurred throughout the region, but as with today, post-glacial Europe was a vast area with variances in culture and environment that have led to a great diversity in the sites and artefacts that are discovered. The establishment of forest led to differences in the type and patterns of game available for hunting.

Whereas Upper Palaeolithic bands hunted predictable migratory game such as reindeer their Mesolithic successors had to create new subsistence strategies to deal with the multitude of species that faced them (Fagan, 2001). Legge and Rowley-Conwy (In Pryor, 2003) provides evidence of the variety in Mesolithic diets by analysing animal bones found at Starr Carr. They showed that wild cattle made up the majority of bones, followed by elk, red deer, roe deer and wild pig. Starr Carr also revealed evidence of domesticated dogs; it is probable that they would have been used for hunting and rounding up rather than as pets. Other signs of domesticated animals come from Bahn (Bahn, 1980) who suggests that there may be

evidence for tethered horses from as early as the Middle Palaeolithic, their use, however, can only be inferred, but some suggestions are as pets, captive live meat, or modes of transportation or traction.

The interactions and uses of animals in Mesolithic times can only be speculated until more evidence is uncovered. However, if Mesolithic people were manipulating wildlife then they certainly also had to be manipulating the plant-life as well. In comparison to the Upper Palaeolithic diet, the importance of plant foods grew. Sites such as Staosnaig (Mithen, 1999) have revealed thousands of charred hazelnut deposits in large, circular depressions that imply intensive exploitation.

The new plant foods could be easily collected and stored and less nourishing foods could be consumed to fill in any shortages. Smith (In Morrison, 1980) recognised a number of sites where evidence of burning coincides with a rapid increase in hazel pollen. Although some burning may have been caused accidentally, evidence of repeated burning for forest clearing also comes from Starr Carr (Fagan, 2001) and Blacklane, Dartmoor (Simmons in Morrison, 1980). At North Gill, pollen sequences show that oak, willow and alder trees were removed to open the tree canopy and encourage the growth of shrubs, perhaps in order to attract wild game (Mithen, 1999). No such evidence for similar activities exists in Palaeolithic sites and therefore this must have been a direct response to the changing environment. Further evidence of human intervention in the environment comes from Dallican Water, Shetland, where pollen analysis shows a reduction in ferns and tall herbs most probably due to grazing by red deer.

Shetland was an island by this time and so humans must have used boats to transport the deer (Mithen, 1999). Contention exists as to how much Mesolithic bands intervened in the landscape. New evidence is suggesting that Mesolithic people had begun to grow non-indigenous cereals. Pollen grains of cereal types have been found at Cothill Fen and Machrie Moor dating to 6,800 and 5,880 radiocarbon years BP (Mithen, 1999) and the Franchthi cave site in Southern Greece reveals use of pear and pistachio as well as wild forms of barley and lentil (Dennell, 1992). There is, as yet however, no proof that domesticated forms of cultigens were used prior to the Neolithic period, but it is certain that the practices of the Mesolithic bands paved the way for the agricultural 'revolution'.

In fact, evidence at Chateauf-neuf-les-Martigues, in Southern France, suggests domesticated sheep were being kept by the Mesolithic Castelnovian before the arrival of true Neolithic culture in that area (Clark, 1980). If agriculture is seen to be a natural progression step then these individual finds should be expected. These new food sources presented man with new and complex problems to solve. The reliability and predictability of the Upper Palaeolithic had gone, and Mesolithic man had to start thinking about the future. These needs led to a demand for new technologies. The traditional 'broad-blade' and Maglemosian flint industries were no longer suited to the plethora of new fauna and vegetation.

Tools had to be developed to deal with the new environment and archaeological finds chart a huge variety of tools developing through the Mesolithic period. During the Upper Palaeolithic tools for specific tasks such as sewing needles and nets were common and the Palaeolithic traits in the

use of burins and step retouching of backing blade-lets continued into the early Mesolithic. However, what is most notable about the changes in Mesolithic toolkits is the increase in specialisation. 'Narrow-blade assemblages' became the norm and microliths are found in abundance throughout Mesolithic sites. This specialisation implies that the Mesolithic people were gaining an understanding of their surroundings and adapting accordingly.

Toolkits from sites at the Baltic Sea include canoes and bone-tipped fish spears, harpoons and traps (Fagan) and in Britain middens at Oronsay have revealed small antler harpoons and bevel-ended elongated pebbles: tools specific for exploiting the coastal resources (Mithen). It is significant that this adaptation occurs in two distant and distinct places, this only goes to emphasise the fact that the adaptations were due to peoples' immediate environment. In non-coastal areas, toolkits were also adapted accordingly. Schwantes (In Clark, 1980) has interpreted the hafted axe and adze as adaptations to the spread of forest. The stump of a birch tree at Starr Carr shows evidence of cutting at an oblique angle, probably by an axe, though it is possible that it may have been made by a beaver (Bahn ; Renfrew, 2000).

With Mesolithic bands no longer having to track the migratory behaviour of animals and the relative increase in abundance of local resources, a more sedentary existence could be established. Although there is no evidence of permanent home bases, Mesolithic people most certainly moved around much less than their predecessors. Larger and more strategic settlements appear near bays, rivers and lakes, with Starr Carr being one of the most important sites as yet located. Starr Carr shows repeated settlement and a

build up of smaller bases in the surrounding area (Pryor). A study of raw material finds at Mesolithic sites provides further information about settlement patterns.

A change from dominantly white flint assemblages in northern English sites to poorer quality chert and translucent flints implies the exhaustion of local resources (Mithen). Mithen suggests an increasing population or changes in the environment compounded by a reduction in mobility patterns, forcing the hunter-gatherers to use local, poor quality materials. The fact that the people stayed and used the poorer quality material rather than move to an unexploited area certainly suggests that moving on was no longer a viable option. Estimating the population is extremely difficult and estimations vary dramatically, but general consensus is that populations rapidly increased (Pryor).

The increase in population density would have resulted in a reduction of territory size. J. G. D Clark (In Fagan) identified three major Upper Palaeolithic social territories, between the Netherlands, Sweden and Poland, containing three distinct cultures, Ahrensburgian, Swiderian and Bromme, each with territories of approximately 100, 000km².

By 6000 B. C. this region had been divided into at least fifteen territories with areas of only 20, 000km². Interaction between bands would have been more frequent and this would almost certainly have led to a greater social complexity. The two shell middens uncovered at Morton, Fife (Coles in Pryor), indicate the possibility that bands were becoming territorial. Vast amounts of

artefacts were revealed, but more importantly is the significance of the size of the structures.

The heaps were very close to the shoreline and should have been dispersed by wind and waves, the fact that they have been preserved suggests that they were carefully positioned and built up by human activity. They are similar in shape to the long barrows of the Neolithic and perhaps also have the same symbolic role. Pryor suggests that these shell mounds provide visual markers in the demarcation of territory. Another indicator of increasing social complexity comes with the appearance of cemeteries throughout northern Europe during the Late Mesolithic (Fagan). Aveline's Hole revealed at least 70 individual human remains and suggests this site was used for burial (Pryor). Cemeteries would have had no use in a culture that was always moving around and this probably explains the lack of burial sites in earlier times.

There are, however, individual burials from the Upper Palaeolithic such as the Red 'Lady' at Paviland (Pryor). This site reveals the use of ochres and funerary objects such as beads and helps to give an indication of ritual practices from this period onwards as societies became more complex. Many aspects of the European Mesolithic were simply continuations of the Upper Palaeolithic societies. It was, however, a time of continual change and development in both the environment and the cultures themselves.

Mesolithic people were not only constantly re-adapting to their varying world, but also developing new subsistence practices, which paved the way for the advent of agriculture. It would seem that the dramatic change in

climate had a huge snowballing effect, forcing advances in technology, culture and social interaction.