

Geology and the landscape

Surrey – or rather the area which now comprises the modern county – is thought to have been inhabited for at least half a million years. Its landscape, however, evolved over millions of years prior to the earliest humans. During this vast period, an incredible amount of change occurred in the way in which people moved, lived, worked, established a sense of identity and adapted to their environment. Surrey's geology affected most aspects of society, including farming. As the overall poor quality of soil has made the area less suitable for agriculture than elsewhere in Britain, settlement has tended to cluster around more fertile areas, such as the Thames floodplain and the river gravel terraces. The geology itself is quite varied, and in the 30 miles that one travels from north to south in the county, at least eight different soil and rock types are crossed, which run eastwest in geological bands. Although gravel and alluvium beds dominate around river crossings, chalk, clay and greensand are the overall principal strata, and they all vary in their suitability for agriculture and settlement.

The low-lying poorly drained clay of the Weald was originally laid down about 130 million years ago, when the local climate was still warm and swampy. This was followed by the lighter sand and sandstone of the Lower and Upper Greensand, between which formed the clay, mudstone and siltstone of the Gault Clay. 65 million years ago, the chalk limestone which makes up the North Downs ridge (as at Betchworth, left) was then



deposited, a feature whose steep escarpments and thin soil have made habitation challenging for millennia. Image: © Colin Smith, cc-by-sa/2.0, ograph.org.uk/p/3017282; Map: urrey County Archaeological Unit)

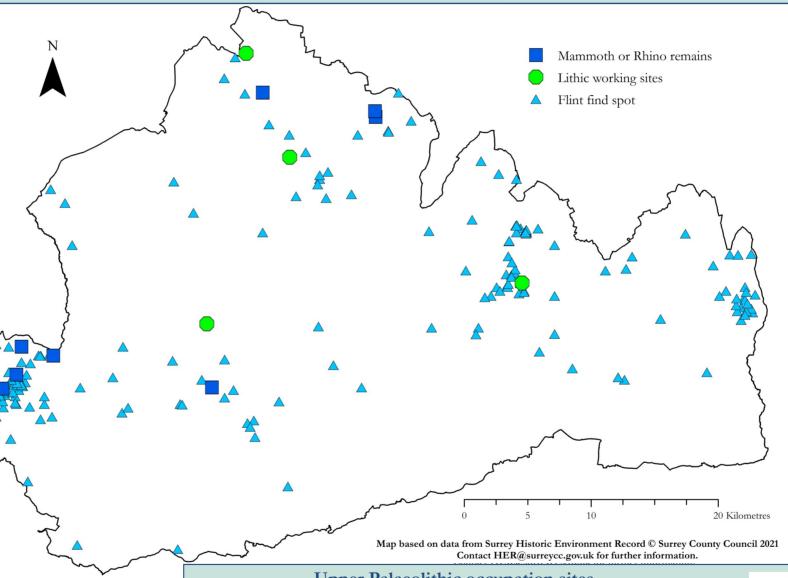


Vanous Solifluction Brickearth

Farnham gravel terraces

Although the number of known Palaeolithic sites in Surrey is limited in comparison to other counties, there are distinctive geographic clusters. One of the earliest known occurrences are the various flakes and handaxes from the gravel spreads of Farnham's river terraces – the former floodplains of the River Wey – beginning with 'Terrace A' (left), whose sediments are the earliest in the sequence, dating over 400,000 years ago to the Anglian stage. A number of Acheulian hand-axes have been recovered from the Wolstonian Terrace B, and mammoth tusks, teeth and bone were common finds from the lowest gravels of Terrace D deposited at the peak of the last Ice Age – most of which were revealed during quarrying, as at Coxbridge (cover) and Badshot Lea (right) sandpits (Photos: David Graham, Farnham Herald; Drawing: John Wymer, after Derek Roe)





Early flint tools

Flint hand-axes – such as the Acheulian hand-axe from Farnham (right) – were the earliest tools used, with multiple functions, including for skinning and butchering animal carcasses. As more specific tasks were required and technology became more

skilled, other tools such as knives or scrapers – like the example from Bourne Woods (middle) – were produced as well, along with long

blades of similar size and shape (see below). (Images: Chris Taylor, Museum of Farnham; Drawing: W F Rankine)







Metal Detecting

If undertaken responsibly, detecting can make important contributions to archaeological knowledge. Detectorists are reminded that it is illegal to trespass – remember all land has an owner! - and to record finds with their local Finds Liaison Officer and the Portable Antiquities Scheme. For more on the Code of Practice, please see www.finds.org.uk

Upper Palaeolithic occupation sites

Anatomically modern humans – homo sapiens – first made their appearance about 40,000 years ago, though Surrey evidence is rare before the Late Glacial period, when migrating groups would have tracked animal herds such as reindeer and horses. Their temporary

camps leave little trace on the ground however, and are usually indicated by flint scatters. One

such excavated site from this period was at Guildford fire station (left), at which over 2,500 flints – including 'long blades' – were recovered. Such 'long blade' sites tend to occur in river valley terraces, as at Church

