

Chalk Links in the North Wessex Downs

“Chalk Links” Fact Sheets:

Geology groups across the region have produced a series of fact sheets explaining how the underlying chalk affects other characteristic features of this unique area including landscape, soils, land use, industry, hydrology & archaeology.

Other fact sheets in this series can be downloaded from: www.northwessexdowns.org.uk

FACT SHEET: CHALK LINKS TO ARCHAEOLOGY



Kennet & Avon canal



Wilton Water with canal & pumping station behind



Rybury



Wilton Windmill



The majority of the sites mentioned here are easily accessible, some have dedicated footpaths such as the White Horse Trail, the Ridgeway, the Wansdyke footpath and the canal tow-path.

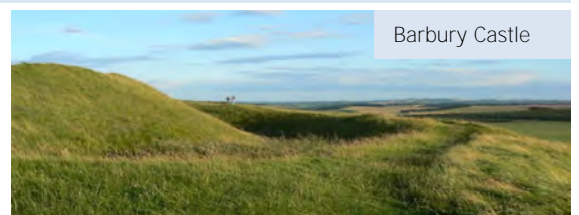
The Kennet & Avon Canal, linking the Thames at Reading with the Bristol Avon at Bath, starts cutting through the Chalk when it enters the Vale of Pewsey, east of Devizes, which it follows until it comes to its end south of Savernake Forest near Wilton. It then had to cut through a Chalk ridge, the highest point of the canal, 145 m above sea level to the valley of the River Dun, which meets that of the Kennet at Hungerford, continuing through to Reading.

Crofton Pumping Station was built to solve the problem of insufficient water to replace water lost as boats went through the locks over the summit. Wilton Water was a natural lake, fed by springs emerging from the base of the Chalk. It was enlarged to form a reservoir with a dam. Two steam-powered beam engines, dating from 1812 and 1846, raised the water 12 metres to the summit ‘pond’ a mile away. This stretch between the topmost locks passes through the Bruce Tunnel, 459 m long, under the top of the Chalk. The pumping house, with a huge coal-fired boiler driving the beam engines, still does this but only on holiday weekends. Electric pumps are used nowadays.

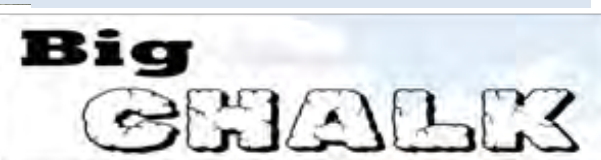
Mills for grinding corn and fulling woollen cloth in the chalk country of the North Wessex Downs were usually powered by rivers like the Kennet and the Test - many have been converted to houses, or become derelict. The **Wilton Windmill**, a tower mill for grinding flour, was built in 1871 to replace the water-driven Bedwyn Mill - the Kennet & Avon canalisation of the River Dun caused closure of several water mills in the area. Placed on a ridge of chalk at the head of the Pewsey vale, it is in a good windy spot! It is fully restored, working on summer weekends.

Iron Age Hill Forts: Natural features have been emphasised by earthworks since the Stone Age. Dating from the last 800 years BC, hill forts invariably have spectacular locations, taking advantage of the Chalk topography. There are more than 10 in prominent positions on the edges of the North Wessex Downs, providing excellent views of the surrounding countryside. The enclosures may have had a single rampart, e.g. Rybury, Lidbury, & Uffington Castle, or multiple ramparts, e.g. Barbury & Oldbury.

Wansdyke is a defensive bank and ditch, built in the Dark Ages around 1500 years ago. Traceable from the Bristol Channel to the western borders of Berkshire, 12 miles of this impressive fortification remain running across the highest parts of the Marlborough Downs.



Barbury Castle



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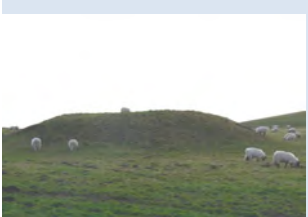
The Ridgeway



Adam's Grave long barrow



West Kennet long barrow



Round barrow, Pewsey Downs



Alton Barnes white horse 1812



Cherhill white horse 1780

The Chalk downs are remarkably rich in relics of pre-history. Earthworks, tombs and the remains of temples from the Stone Age, Bronze Age and Iron Age are to be found, many near to the **Ridgeway** – that ancient track following the high ground of the Chalk from Norfolk to Dorset. Chalk uplands were favoured by pre-historic people as they were well-drained, easier to clear than the valleys, and there was plenty of flint for tools.

By the late Stone Age, settled farmers were growing cereals and keeping cattle, pigs, sheep & goats. They changed the landscape, clearing the natural forest and building massive ceremonial monuments with huge banks of white chalk rubble, making a prominent statement on the landscape - but the simple domestic sites are still largely unknown.

Stone Age Causeway Enclosures, chalk banks & ditches around 5500 years old, crowned a number of hilltops e.g. Knap Hill, Windmill Hill and Rybury. A number of entrance causeways separate sections of ditch. Prominent locations in the landscape were invariably chosen. They were places for the dead, left until their skeletons were picked clean by birds. It would seem that the living gathered at certain times of the year as the surrounding ditches contain animal bones and pottery. The human bones were probably then taken to the long barrows.

Long Barrows, housing the bones of up to 50 people, were in use at the same time. Adam's Grave & West Kennet are typical examples of the chambered type, having dry-stone walling inside and sarsen stones. There are quite a few others strategically placed on ridges - surely they must have been intended to be viewed from a distance as reminders of long-departed ancestors. They were ceremonial sites cared for over generations, before being finally closed at the time of the henge-building culture's arrival. Then **Round Barrows** appeared. They were not open tombs but graves for just one person or a family group, covered by a mound of chalk rubble, maybe surrounded by a bank or a ditch like the long barrows they replaced.

Henges were in use 4000 years ago as a new culture spread to Britain in the late Stone Age. They are circular enclosures surrounded by a huge bank and ditch, with or without stone circles inside. At Avebury, the most famous in this area, a 9m high bank of white chalk rubble defined the monument. Avebury is part of a group of ceremonial structures including Silbury Hill, The Sanctuary and two stone-lined avenues. Henges are associated with rivers, in this case the River Kennet. Within Avebury's enclosing bank was a circle of 98 stones with a further 2 smaller stone circles inside.

Silbury Hill is the biggest pre-historic man-made structure in Europe built of chalk 4400-4000 years ago in the late Stone Age. It formed a huge white pyramid over 40m high with a 9m deep ditch around. Using chalk block, rubble and turf, it was built up in 6 steps with a spiral pathway to the top. Its purpose is a mystery. Was it a shrine to a water god such as the Celtic water god Sul? It is surrounded by springs feeding the River Kennet.



Knap Hill causewayed enclosure



Avebury



Silbury Hill

White Horse hill figures are associated with the North Wessex Downs, particularly in Wiltshire, where there are seven! But the original white horse is below Uffington Castle Hill Fort, emblazoned on the chalk escarpment since the late Bronze Age, about 3000 years ago. It was made by cutting trenches into the chalk to outline its shape, backfilled with chalk rubble, which is replaced every few years. This is a more long-lasting method than that used for more recent horses that merely had the turf removed to expose the chalk beneath. These latter date from the 18th - 20th centuries – the latest being the Millennium Horse on the escarpment above Devizes.

For more information please visit:

Wiltshire Geology Group Website: www.wiltshiregeologygroup.org.uk