

the outdoor classroom

the river crane



Introduction to the River Crane

The River Crane and Duke of Northumberland's River form part of the West London Green Chain, a twenty mile chain of interconnected green spaces that runs along the River Crane and its key tributary, the Yeading Brook, to the River Thames. It is recognised as a vital wildlife corridor, allowing the movement of birds and small mammals and the distribution of plant species through the urban landscape of West London.

The River Crane is one of the main tributaries of the River Thames in Greater London. The river source is in Harrow, north London where it is called the Yeading Brook. The river flows through five west London boroughs – Harrow, Hillingdon, Ealing, Hounslow and Richmond – and joins the Thames at Isleworth.

The river flows through built up areas of West London, but there are six nature reserves along its length, including Ickenham Marshes, Gutteridge Wood and Crane Park Island (part of Crane Park). There are also large open spaces such as Cranford Park and Hounslow Heath. The river has sections of woodland, wetland and heath as well as flood plain. At its end it flows into the River Thames, another important wildlife corridor for London.

Although the river has been altered by man along the length of the river you can find the following features: small meanders, braided channels and flood plain. Isleworth Ait, an island, is at the point where the River Crane enters the River Thames in Isleworth. A section of the river near the confluence with the Thames is tidal.

The catchment area of the river is 124 km². The landscape is generally flat - the maximum height at the source near Harrow is approximately 120m. The river gradient in the upper reaches is 1 in 30 and in the lower reaches 1 in 1000. Generally the channel is narrow, shallow and slow running throughout its course.

The River Crane system includes the Duke of Northumberland's River. This channel was built in the 16th Century as an artificial water supply and used as a source of water power for mills and to provide water to Syon Priory. The upper channel of this river transfers water into the Crane at Feltham from the River Colne. The lower channel transfers water out of the Crane at Kneller Gardens in Twickenham to the River Thames at Isleworth.

Information taken from:

- FORCE Crane Valley Park feasibility study June 2009
- Environment Agency Local Plan: North London Environmental Overview December 1999

Habitat sheets are included in this pack.

Sources of further information about the River Crane are to be found at:

- FORCE www.force.org.uk
- London Wildweb where there is a map and description of the habitats along the length of the river www.wildweb.londongov.uk
- London Wildlife Trust for a description of habitats on LWT nature reserves along the River Crane www.wildlondon.org.uk
- For a map of the Crane catchment look at the River Restoration Centre web site under London Rivers Action plans www.therrc.co.uk

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The Influence of Man on the River Crane

Sources of further information are to be found at:

- Timeline (available as background material)
- FORCE website www.force.org.uk
- London Wildlife Trust www.wildlondon.org.uk
- Richmond upon Thames Libraries. Local Studies Collection www.richmond.gov.uk/local_history_river_crane.pdf

The landscape of the lower Crane Valley today reflects its history and past use. This history can be seen in some of the place names in current use - for example farms have given their names to *Marsh Farm Road* and the *Butts Farm Estate*; and old industries are represented by *Powder Mill Lane*, *Mill Road* and *Feltham Marshalling Yards*. *Mereway Road* indicates where the river was widened and Mereway Bathing Place was established and *Craneford Way* marks where there was once a ford across the River Crane. *Hospital Bridge Road* is reputed to be close to the site where King James II set up a field hospital for his troops in 1688 before he fled abroad.

Mills along the River Crane

The mills along the river made use of it as a source of power for a thousand years. All of them were using water power for an industrial process, including flour milling, copper production, sword making, milling linseed oil, paper making and the production of cattle cake, as well as the best known local industry of gunpowder.

Many of the mills were associated with the Duke of Northumberland whose family owned rights on the River Crane from 1553 until the 20th century. The Duke of Northumberland's River is an artificial channel that pre-dates the Duke, being constructed in the early 16th Century to take water from the River Crane to Syon Priory. The Priory was demolished soon afterwards, on the orders of Henry VIII, and the Duke of Northumberland was provided with the land on which Syon House now stands. The Duke's river had water mills all along its course and the water eventually fed the fish ponds at Syon. In 1931 the Duke sold his rights to both the Crane and the Duke of Northumberland's River to Middlesex County Council.

The old sites of mills on the river can be found in the landscape. Evidence of the extensive Hounslow Powder Mills, in the form of blast mounds, grinding wheels, sluice gates and the Shot Tower, can be seen in Crane Park. These mills produced gunpowder for military and sporting use, on a site of more than 100 acres, between 1766/8 and 1927.

For details about Hounslow Gunpowder Mills see the fact sheet by Local Studies Library referenced above.

Mereway Sewage Works and the “Dust Destructor”

In 1879 a sewage works and “dust destructor” (or incinerator) were opened in Twickenham on a “convenient spot of wasteland at a distance from the town, known as Mereway” (The Builder 31/1/1880). The town’s isolation hospital was located nearby. The article states that the works did good service, “but a growth in the population from 10,000 to 27,000 naturally called for a further extension.” The sewage works was in use until the 1930s when a much larger facility was constructed at Modgen Lane. The buildings now form part of Richmond Council’s Craneford Way depot.

Flooding on the River Crane

The River Crane has always been prone to flooding as its clay catchment provides a rapid run-off response to rainfall. This effect has been accentuated in the last 100 years by increased urbanisation, leading to more artificial drainage and hard standing. In the 1800s the natural flood plain of the lower Crane extended across a large part of the adjoining market gardens and, as these were sold off for housing, flooding became an issue – with floods reported in 1892, 1895, 1903, 1914, 1916 and 1920.

Eventually, from the 1920s, work was done to deepen, straighten and canalise the lower reaches of the river as a means of controlling the flood risk. This work was reportedly done for free by a local gravel contractor, and resulted in a deep and wide rectangular channel from Kneller Gardens to the far side of the A316. There has been no flooding since this time – however a side effect has been to greatly reduce the environmental and aesthetic value of the lower Crane. FORCE hopes to see the re-instatement of more natural banks in the future, with flood protection levels maintained or enhanced.