

CAC Kids visit to the Crofton Beam Engine and Savernake Forest

26th August 2012

This was our CAC Kids first venture into the world of industrial archaeology. Crofton Beam Engine was constructed in 1807 and is basically a great big pump, pumping water to the summit of the Kennett & Avon canal.



Crofton Pumping Station

We all arrived just in time to hear a short talk on the history of the Crofton pumping station and its restoration. It is now fully operational and indeed has been called upon to from time to time when there have been problems with the current electrical pumps.

“Canalisation” of the River Kennett between Reading and Newbury was undertaken by John Hore in 1723. The River Avon between Bristol and Bath was canalised by the same man in 1727. The two sections were linked by the creation of 57 miles of canal, constructed by John Rennie, between 1794 and 1810. The summit of this canal lies between Crofton and Burbage, 450 feet above sea level, 40 feet above a reliable water source. To avoid the cost and unpredictability of digging a tunnel, the Crofton pumping station was constructed a mile from the summit, by the nearest source of water. It pumps water into a leat that feeds into the canal just above its highest point. In the early industrial days and before the onset of the railways, the canal network was a key and extensive means of transport. It was Brunel’s railways that would bring about the demise of commercial use of the canals.

We had a fascinating wander around the pump house “in steam” and saw all the components in action. Had there been any horologists amongst us, they would have been interested by the Honey Street clock, built largely from spare bits of agricultural machinery around 1854. After the tour we had time for a sausage sandwich from the BBQ and, for the adults, a drop of local real ale, and a stroll under the railway line to the canal and lock.



Engineering in action



CAC Kids exploring the Beam Engine



By the canal

Then it was back to the cars and a short drive to Savernake Forest.

Savernake Forest is old, very old. The earliest known records refer to it as "Safemoc" in the time of Athelstan in AD 934. It contains some enormous trees, some of which are said to be over 1000 years old, such as the "Big Belly Oak". Savernake is the only privately owned forest in the country and has been in the same family since the Norman Conquest. It was a favourite hunting ground of Henry VIII and where he met Jane Seymour.

Parking and setting ourselves down perilously close to the ice cream van we sat down for a picnic and a number of little projects. Firstly, we had printed some templates for the Woodland Trust colouring competition and we set about colouring in a variety of ladybirds, grasshoppers and wood lice. There were two great efforts from Niamh and George, and several adults couldn't resist a go, although they were not allowed to send them in to the Trust and certainly won't be winning a prize.



Artists had at work

We wanted to consider the trees and, after a spot of tree climbing, set about measuring their comparative height. And we had a very cool way to do this. The technique was to stand just far away enough from the selected tree so that, by looking back through your legs, you could just see the top of the tree. Using this obviously very complex trigonometry, it was simply a case of counting the paces back to the tree to work out which tree was tallest. George, Niamh and Sophie all had a go. We used a more conventional method for measuring the circumference of the trunk, with a tape measure. Some of the oldest trees in Savernake forest have a girth of over 10 metres (the Big Belly Oak is 11 metres but, unfortunately, is too close to the busy main road for our CAC Kids to study safely). Our tallest example was 5.5 metres in circumference.



Tree measuring

Next up was some twig collection, which quickly became a running track as a final stretch of the legs, together with some football, before setting off home. Time had flown by and our forest bug collection project will wait for another time.



Twig collecting

Thank you to all the parents for coming along, and our CAC Kids, George Swann, Hannah Swann, Niamh George and Sophie Shattock.

For more information on both sites, please see:

<http://www.croftonbeamengines.org/history.html>

<http://www.savernakeestate.co.uk/>