"By Water to Wakefield": Introduction and the Aire and Calder Navigation

Notes on John Goodchild's talk at Wakefield Archives on 16th April 2014

John Goodchild introduced his series of three talks by explaining that these would provide an outline history to the three waterways that meet at Wakefield. The Aire and Calder Navigation was opened from Weeland through to Leeds and Wakefield at the end of the 17th century, and the Calder and Hebble Navigation in the 1760s from Wakefield to Salterhebble and later to Sowerby Bridge. These two navigations used the existing rivers Aire and Calder, dredging them, and by a system of weirs and locks made them navigable. The third waterway was the Barnsley Canal which opened in 1799 and extended to Cawthorne in 1802. From Weeland with access to the North Sea, goods could be transported north to the whole of the Vale of York and up the River Ure to Boroughbridge, south to Lincolnshire, and west to Yorkshire and Lancashire. The Barnsley Canal gave access to the Don Valley, and by 1816 to Sheffield. From Doncaster via the River Trent and the Grand Union Canal it was possible to reach London.

John had acquired documents concerning the Aire and Calder Navigation from a country house sale at South Elmsall. Documents relating to the Calder and Hebble Navigation had been 'dumped' at Sowerby Bridge having been disposed of from the Halifax offices of the navigation. The Barnsley Canal documents came from a firm of Wakefield lawyers.

The waterways enabled and encouraged commerce and industry as raw and manufactured goods could be carried at economic prices compared to road transport. Roads were often in a parlous state with ruts and holes, made worse by an increase in wheeled vehicles. The hilly character of the Pennines made journeys between Yorkshire and Lancashire difficult. By comparison, carriage by water was reliable and boats could take greater loads, thereby reducing the costs. Even during the medieval period water transport had been used to carry stone for York Minster, Selby and Rievaulx Abbeys. By the early 1600s there was great awareness of the value of water transport and during the 17th and 18th centuries investment was made in improving existing waterways and building new canals. The new navigation and canal companies were set up with venture capital and investors could make enormous profits.

Plans to improve the River Aire had first been made during the 17th century and by 1698 a total of £26,700 capital had been raised. An Act of Parliament was granted in 1699 naming eighteen undertakers, nine from Leeds, and nine from Wakefield, who would oversee the improvements. By 1700 boats reached Leeds Bridge, and by 1702 reached Wakefield. The river below Knottingley was also deepened to allow for larger boats.

Large consignments of coal, limestone, corn and stone were carried on the Aire and Calder. Owners of collieries were quick to exploit the new waterways, exporting their product to Ripon, York and Malton, and south to Lincoln and Boston. The first public railway at Lake Lock, Stanley was constructed so that the colliery owner could transport coal down to the Navigation. Limestone was sent to the collieries so that small coal could be used to produce lime. Raw wool was transported to Leeds, and finished cloth sent from there to markets throughout the country and abroad. Corn was transported to Wakefield from the eastern counties and thence via the Navigation and the Rochdale and Huddersfield canals into Lancashire supplying the whole of the north-west. Stone from the quarries in the Elland and Halifax area was sent via the Calder and Hebble Navigation to pave the streets of London.

The success of the waterways led to great profits for the investors. By 1720 dividends were 7%, and by the 1790s had risen to100%. Between 1800 and 1830 descendants of the original

investors were receiving dividends of 270%. Smyth at Heath Hall in 1820 was receiving a dividend of £2,800 per annum, and Spencer Stanhope at Cannon Hall £6,000 per annum. With investing such an attractive prospect, by the 1790s 'canal mania' was taking hold, with the public rushing to invest in new canal schemes. Not all came to fruition, but successful enterprises included the Rochdale Canal and the Huddersfield Canal.

The 19th century brought many changes. In 1805 there was a proposal to provide a harbour at Wakefield but an Act of Parliament was never obtained. However the Aire and Calder Navigation Company did build a harbour and docks at Goole and a company owned town which included the churches, houses and hospital. In 1851 the Aire and Calder offices that had been at Wakefield were moved to Leeds, and the buildings leased to a Grease Recovery Firm, the yard later becoming known as 'Grease Oil Yard'. Enterprising landowners continued to construct canals; John Lee of Wakefield building a canal from Lake Lock to Bottomboat. The Aire and Calder Navigation Company however would not supply water for it - it became known as John Lee's duckpond. In 1868 the Aire and Calder Navigation Company bought Wakefield corn mill, which was subsequently burnt down but rebuilt.

The innovation of compartment boats in the second half of the nineteenth century increased the capacity for carrying coal. Consisting of nineteen compartments pulled by a steam tug, they were split into two to go through locks. At Goole hydraulic hoists lifted the compartments to empty them into the holds of larger sea-going boats. Coal was transported in enormous amounts by this method for bunkering for steamships, screw steamships appearing in the 1830s. During this period less grain was carried from the eastern counties as the first imports came from America in the 1850s, and from Chile from 1862; these came through Liverpool and were then transported eastwards on the trans-Pennine canals. The transport of stone from Halifax and Elland was also reduced, granite and slates now coming from Wales.

Hydraulic lift at Goole

Canal and river transport presented specific problems for which provision needed to be made. Steam tugs were used to break the ice, an annual problem. Floods caused much damage; in 1866 a severe flood caused the level at Horbury Bridge to be 12 feet above normal. Bridges upriver from Knottingley made it necessary for masts on boats powered by sail to be removed, and mastyards were instituted at Wakefield and at Knottingley. If boats were not steam-powered, horse marines were available for hire and most public houses on the canal provided stabling for the horses. These were used on the Calder and Hebble until the 1960s.

During the first half of the twentieth century the Navigations continued to flourish, even for a time following nationalisation in 1948. 3,200,000 tons were carried in 1962, and £360,000 in tolls collected. But old boats were not replaced, new ideas were not encouraged and by 1971 only 2,000,000 tons were carried and £145,000 raised in tolls. In the 1950s the Barnsley Canal, which in the latter part of the 19th century had seen a fall in traffic and been taken over by the Aire and Calder Navigation Company, was abandoned.

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