

## Windmills

Wind-powered mills were slow to reach Co. Durham. There were just six in the county by 1380, one of them in Bishopwearmouth. This would have been a simple type of post-mill, known as a stob- or stoup-mill. To catch the wind an external beam turned the wooden superstructure, housed on a great post.

Earlier mills were water-powered, controlling the Wear's force with dams which also contained fisheries. There are thought to have been watermills at Monkwearmouth, Hylton, Southwick, and perhaps Ryhope. Because one medieval dam was called Ravensyare, and Raven's Wheel was later name of part of the riverbank below Southwick, we can guess that here stood Southwick mill, recorded in the 11<sup>th</sup> century. Milnyare and Ebyare (the latter probably near the river mouth at Monkwearmouth) were listed among river fisheries in 1321.

The Monkwearmouth mill vanished from the monastery's accounts in c. 1387, and after this dams were destroyed, for they impeded river traffic. Windmills had the advantage of using sites much less in demand, exposed and away from the town. Those near the coast were also convenient landmarks for sailors. One or two horse-mills operated in Sunderland borough in the 17<sup>th</sup> century, associated with malt-milling and brewing. But wind was far the most important power source for corn-milling after 1500. By 1530 – and perhaps much earlier – Southwick watermill had been replaced by a windmill in the village centre.

The oldest windmill surviving into modern times was said to be Hendon, an 'ancient wooden stob-mill' with a 'massive post', in ruins by the 1850s on the sea banks. In central Sunderland, four corn windmills counted as 'ancient' in 1708. West of Bishopwearmouth, at Millfield, a windmill was recorded in 1649. Buck, c. 1720, drew six on the eastern side of town: five behind burgage properties south of High Street East, and another near Monkwearmouth village. There were perhaps half a dozen more beyond the town: at Southwick, Hylton, Ryhope, Hendon Grange, Silksworth, and in outer Bishopwearmouth.

Hylton windmill stood above the castle on a high plateau. Silksworth too had a mill hill. In Tunstall an acre was allotted to the mill when the township was enclosed in 1671. On open fields south of Hendon stood two mills, close to each other and to the sea, at Grangetown and Ryhope. Thomas Martin, miller at Ryhope, died in 1682 leaving a pair of cranks, mill sails or sailcloth, cogs and rungs, a mill chisel and mill picks.

Strong winds could blow over post-mills, like Hendon old mill, which had to be re-erected. From the 17<sup>th</sup> century a more substantial tower design was introduced. An example is Fulwell windmill, built 1806-8. The mid-18<sup>th</sup> c. windmills on Hendon Lane, one of which replaced the old stob-mill, appear a more sophisticated style of post-mill with fantail. Though steam-powered mills were introduced from c. 1840, windmills remained in use long after that.

NOTES: Hydrographic Office, Ve 44, 28-9; N. Cossons, *The BP Book of Industrial Archaeology* (1993), 36-9; *Origins*, 58-60, 89; Rain's Eye Plan; Summers,

Sunderland, 279-80 fn., 477-87; Hull Univ. archives, DDCB 13/71; DULASC, DPR, 1668, inventory of Thomas Humble; DPRI/1/1672/H25/1; DPRI/1/1686/W12/1; Register of Wills, IV, f.108-v, and original; DPRI/1/1682/M5; DRO, D/Lo/D 320-57; DCM, Cartulary II Misc.Ch. 6223a. Reg.I.i f.39rv; R. Hyslop, 'Notes on Bowmaker's Mill', *Antiq. of Sund.* x (1909), 158-75; TNA, E134/7Anne/East1 (DURHAM) 1708; Dur. Chapter Lib., Sharp 2, facing p. 225; Northumbs RO, ZMI/B8/X/1; Hutchinson, i, p. 529n