



How Industries Have Shaped the River Tweed

By medieval times, the importance of the river as a fishery and source of water power was well established and extensive drainage and bank protection took place. The agricultural and industrial revolutions caused a fundamental change to the river as the use of drainage methods became far more widespread and ploughed areas greatly extended. The industrial use of water power increased with the rise of the textile mills. Caulds constructed to provide the mills with water for both power and tweed manufacturing processes restricted the spawning runs of salmon and sea trout. The caulds, which were built out into the flow of the river, were made of stone or wood which diverted the water to power the mills. Large-scale pollution of the river by dyes and industrial wastes from the mills, as well as sewage of an increased population occurred. This put pressure on the fisheries as the water pollution had an impact on the fish population in the river. Purification measures were introduced and a slow return of water quality began. Eventually the caulds were breached as the textile mills declined

After World War II modern agriculture and forestry brought a major change with the introduction of deep ploughing of hill ground, arterial drainage schemes and an increase in arable areas, particularly winter barley. The increase in arable areas coincided with the increase in algal (diatom) slime growth in the summer months in the river.

Pollution

Most of the treated domestic and industrial waste of a population in excess of 100,000 ends up in the Tweed. The quality of the waste has for many years been improving due to improvements by the water authorities. There is



also agricultural pollution, particularly nitrates from the land which are washed into the river by rainfall and drainage. Tributary rivers such as the Leet and Eden have a large amount of arable land around them are the worst affected.

Water abstraction (water pumped from the river) for agriculture is also an issue, with the greatest impact being experienced on the River Till.

Recreation

The Tweed now has one of the highest annual rod-caught salmon catches in Scotland as well as being an important Brown trout fishery. The economic value of this fishery has a major influence on the management of the river. Management in areas where fishing takes place includes cutting bank vegetation, management of sediment, the maintenance of croys (structures to guide the flow of the river) and the maintenance of salmon lies. In addition to fishing, the Tweed is an important recreational resource for walking and canoeing.