

fish-life and vegetation of all kinds have been greatly lessened, and in many instances wholly destroyed. This is particularly noticeable amongst the higher order of fishes, especially the salmon family, which are largely of a migratory nature, many of them ascending rivers and other streams for breeding purposes. These waters are usually of the purest, coldest and most limpid description, and therefore best adapted for the propagation of the salmon species. These fish at the time of the first settlements of Canada were found frequenting almost every river and stream emptying into the sea, and the great lakes also. So plentiful were they in many of our waters, before the lumbering industry took such a strong hold in the erection of dams and saw-mills, with the consequent injurious effects from them upon fish-life that fish of all kinds were in great abundance. They were freely used by the inhabitants generally for domestic purposes, and also produced a large amount of traffic and commercial wealth for the country. But as the saw-mills and mill-dams increased in numbers with greater capacity for their work, the mill-dams formed impassable barriers to the ascent of salmon and other fishes to their natural spawning grounds above—and then the hurtful and pernicious effects arising from the sawdust and mill rubbish being constantly cast into the streams poisoned the spawning beds below, and stayed the growth of all vegetation, thus driving away insect life, which is the principal sustenance for fish in their younger stages of existence. As this improvident work of the mills increased in magnitude, so did the yield of all kinds of fish decrease in these waters until it has been found in some cases that, after stripping the neighbourhoods of all lumbering material and destroying all fish-life, these mills have gone into ruin and decay, leaving sorrowful mementos only of their destructive workings in the waters of the country for the inhabitants who follow after. It is, therefore, of the greatest importance that any law which provides 'that sawdust or mill rubbish shall not be drifted or thrown into any streams or other waters frequented by fish, should be maintained and strictly enforced wherever the continuance of fish life is held to be of any benefit to the people. There are yet to be found sufficient numbers of fish, natives of the rivers and other waters, left, from which, by proper protection and good husbandry, an immense supply of fish food and commercial wealth would be readily obtained for the general benefit of the inhabitants of the several sections of the country. Sawdust, as previously stated, is manifold in its range of destruction when allowed to be cast into waters to which fish are indigenous, or where animal or vegetable life is to be sustained. It is an artificial product, alien to and engendering latent diseases of various kinds, with fatal results in all waters where fish life exists.'

That mill-dams and other obstructions seriously damage rivers and waters resorted to by fish cannot be questioned; but this damage would be done even though no sawdust whatever were thrown in them. Further, the contention that sawdust in the streams is offensive to the fish and has caused them to forsake their accustomed haunts, as Dr. Milner some years ago claimed, has never been proved, whereas there is abundant proof that most fishes are not deterred by the floating particles of saw-mill waste. In the New Hampshire Fishery Commissioner's Report for 1885, it is asserted that harm arises from 'the sawdust getting into the gills of the parent-fish'; but there is no case on record of salmon, or shad, or any other healthy adult fish, being found choked with sawdust or in any way fatally injured by the floating particles.

When I accompanied for a time in 1893 the International Commissioners, at the request of the Hon. the Minister of Marine and Fisheries, nothing astonished me more than the extent and serious nature of the sawdust pollution on certain tributaries of the St. John River in New Brunswick. The main river is largely subject to this pollution, but not in any degree to the extent that obtains on some of the tributary rivers. The Aroostook River, which for over 100 miles runs through the State of Maine, and only during the last four miles of its course passes through New Brunswick is a flagrant example. Some of the largest lumber mills in that part of the country occur on its banks, and the lumber industry is of immense extent. Nothing could be worse than the condition of this fine salmon river, and a common opinion prevailed that no salmon could or would ascend it. Yet at the time of the commissioners' visit quite a number of salmon had been noticed a little above Cariboo and a