

weighing several pounds had been caught during the summer in the Detroit River, strongly resembling a salmon-trout, but brighter in colour and longer, and more symmetrical in shape. This description would very well answer that of the true salmon, but in the absence of a personal inspection of this specimen it must only end in conjecture. Another case was reported in several of the papers that a specimen of the salmon tribe had been caught during the past year in the American waters of Lake Huron, and forwarded to Prof. Baird, of the Smithsonian Institute, who pronounced it to be a smelt of the true *salmo-salax*.

It would be most gratifying to have close research made into this subject by thoroughly prospecting, at the proper time, the Saugeen River with its estuary fisheries near Southampton. But the enormity of work which always devolves upon myself and my limited number of assistants in collecting ova at the very period in which an inspection would be necessarily required, wholly forbids the possibility of its accomplishment. Therefore, no other alternative (for the present) presents itself but to continue planting young salmon, as heretofore, in that river, patiently waiting for something to turn up that will either prove or disprove the theory of acclimating these fish to our immense fresh water seas.

Large numbers of the fry reared at the Newcastle establishment last spring were forwarded to Mr. Wilkins, Fishery Officer at Belleville. These were deposited by him in the Moira, Trent and other rivers in that section of the country. Many were also placed in Barber's Creek, at Bowmanville. Others were sent to the Credit River, Duffin's Creek and the Grafton Stream, and the balance were dropped here and there into the head waters of the creek upon which this establishment is built. Throughout the whole of the work of the distribution and transportation of this great quantity of young fry to the several destinations mentioned, the loss experienced was very trivial indeed.

Appearance of Salmon, 1875.

It is a subject of pleasure to again reiterate the statements made in former years of the increasing numbers of salmon that annually enter this stream; one feature in particular, with regard to them during last fall, was their size, which was generally of a much larger average; many of the spent fish were found to range between fifteen and twenty pounds in weight, and in some instances even heavier. It is quite unnecessary to repeat here the flattering accounts which were frequently given by the daily and weekly press of the country, and by the many persons who visited the establishment last autumn, of the ocular demonstration they had of the great numbers of salmon that were in the reception house, the ponds, and in the open stream within the enclosed grounds of this institution.

An account of the annual increase of fish in this stream being given in former years, I would briefly refer to the satisfactory show of salmon that entered it last fall. It was particularly noticed that by far the greater proportion of the fish, were larger and heavier than those of any former year; and it was found that very few of these *big fish* entered the reception house. This, no doubt, arose from the same cause that prevented them last year, namely, the low state of the water in the stream. It appears to be the habit of these large salmon after entering the stream and reaching the fish pools of any depth, to remain there till the latest moment that nature will permit of retaining their ova; and then to run to the nearest gravel bed (sometimes only a few rods above) and there deposit their eggs as quickly as possible, performing the whole operation at times, in one night, and then they retrace their journey directly to the deep waters of the lake.

It is maintained by many professing to have a thorough knowledge of the habits of the salmon, that the emission of the ova, or milt, from the parent fish, is not performed all at once; neither can it be done in a short period of time; nor does the ova all ripen at the same time; and that it is laid from day to day, or from week to week, just as it matures sufficiently for easy expulsion from the body.

This may be the case in some instances; it depends, however, almost wholly upon