

From the appearance of the ova the failure most probably arises from the eggs having been obtained too long, or kept without ice before the starting of the steamer.

It is quite possible that a further supply might be obtained this season, if instructions are sent by the outgoing mail so that the order could reach the collector direct from San Francisco. The actual cost of eggs in America is not much—I have had out many lots of trout ova, and seldom paid more than 4dols. per thousand.

With a view to increasing the chances of success in future similar shipments, I would suggest that the lids of the ova boxes be screwed down instead of nailed, a larger number of holes made in the lid, and the inside of the boxes slightly burnt.

Again thanking you for your kindness in forwarding me the ova,

The Hon. the Colonial Secretary, Wellington.

I have, &c.,

A. M. JOHNSON.

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No. 33.

Sir J. CRACROFT WILSON to Mr. S. C. FARR.

SIR,—

Cashmere, 2nd April, 1878.

I have the honor to report the following circumstances in connection with the fry of the whitefish :—

On the 26th of February you reported that you had opened the two boxes supposed to contain 20,000 whitefish ova, a present from the United States Fish Commission to the Government of New Zealand, that there were a few of the ova hatching out, but that the majority of them had hatched on the voyage from San Francisco or Auckland, the fry from which, were dead. Finally, about 20 eggs produced fry in the hatching boxes of the Society. Two of these died previous to Sunday, the 17th of March. On that day, in consequence of a hot wind from the north-west raising the temperature of the water to 62° Fahrenheit, six more died, and it was evident the remaining twelve would not survive such hot weather.

On Wednesday afternoon the 20th of March, I started, according to promise, by the 4.20 p.m. train for Coalgate station, taking with me an American vehicle, a pair of horses, two servants, one small fish can with an aerating ball and tube, containing the twelve surviving fish, two large fish cans filled with fresh Artesian well water, a four gallon block tin bucket, and 6 packets, each containing ten ozs. muriate of ammonia and 6 packets, each containing ten ozs. of nitre, prepared for the trip by Dr. Macdonald, of Lyttelton. The whole party was franked by General Government, and the thanks of the Society are due to all the railway authorities in Christchurch.

Having taken up my position in the guard's van with one servant, nine parts of water were placed in the four gallon bucket, and three packets of muriate of ammonia and three packets of nitre being added, the mixture was well stirred. The thermometer was then placed in it, and it fell, in a short space of time, to 34° Fahrenheit. The thermometer having been withdrawn, the can containing the fish was placed in the bucket. The servant kept continually aerating the water in the fish can, and thus, without changing the water, or interfering with the mixture, we arrived at Coalgate station at 7.15 p.m., the temperature of the mixture during the journey, never having exceeded 38°.

After giving the fry fresh water, and preparing the freezing mixture as before, four of us started in the American trap, Mr. James McIlraith having kindly volunteered to accompany and show me the new road, which skirts the swamp known by the name of Dr. Turnbull. We, however, lost our way, and nearly two hours of our valuable time. As we were approaching the hotel at Windwhistle, we were joined, according to appointment, by Mr. F. E. Upton, who, on horseback, piloted us to Snowden, the residence of Mr. W. Gerard, where we arrived between eleven and twelve o'clock, midnight.

Having partaken of some refreshment and given the fry fresh water, we were supplied with another pair of horses by Mr. Gerard. Mr. Upton having taken Mr. McIlraith's place in the vehicle, we continued our journey towards Mr. Cotton's house on the border of Lake Coleridge, which we reached about 3 o'clock a.m.

Owing to a cold north-westerly wind which had prevailed all night, there was a considerable surf rolling on to the shores of the lake. We, therefore, thought it advisable to liberate the fry in a small rivulet about two hundred yards from the lake. Previously to liberating them, we took the can into a stable, lighted a candle, and satisfied ourselves that not one of them were dead or injured. We then retraced our steps to Snowden, and took possession of our beds about 5 a.m. Thursday, 21st March.

Lamentable as is the outcome of this handsome present from the American Fish Commission, I congratulate the Canterbury Acclimatisation Society on the fact that nothing was left undone to insure success. Ice was prepared according to Dr. Hector's instructions, and taken by you on board the steamer which conveyed the boxes of ova to Canterbury, but it is evident that the ice, *en route* from San Francisco or Auckland must have failed, and the ova hatched out only to die.

In conclusion, I cannot help making a few observations. The fry of the American whitefish are evidently more delicate than the fry of any other fish known to me, and I am persuaded that not a fry would have reached Lake Coleridge alive, had it not been for the freezing mixtures and the great cold we experienced after reaching Windwhistle.

It is greatly to be desired that all the parties to whom the boxes of this consignment of ova were trusted, should write detailed reports as to results, which reports, if printed and circulated, might help us to discover some means of rearing to maturity these far-famed fish.

One thing is very certain, that they cannot succeed in any place in New Zealand not situated in the mountains.

Trusting that the Council will admit that I have faithfully fulfilled the promises which I made to them respecting these fish, and that the Government of New Zealand will be satisfied with the endeavours of our Society,

S. C. Farr, Esq.,

Secretary Canterbury Acclimatisation Society, Christchurch.

I have, &c.,

J. CRACROFT WILSON,

Chairman.