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1883.

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T A S M A N I A.

LEGISLATIVE COUNCIL.

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SALMON COMMISSIONERS:

REPORT FOR 1882.

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Laid upon the Table by Mr. Moore, and ordered by the Council to be printed,  
July 24, 1883.



To His Excellency SIR GEORGE CUMINE STRAHAN, *Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Governor and Commander-in-Chief in and over the Colony of Tasmania and its Dependencies.*

MAY IT PLEASE YOUR EXCELLENCY.

IN their last Report the Commissioners informed Your Excellency that the uncontrolled direction of a further importation of Salmon Ova, for which a sum of £500 was placed at their disposal by Parliament, had been entrusted by them to one of their number then in England, the Hon. J. W. Agnew. They very much regret that, owing principally to the inability to procure a vessel sailing direct to Hobart from London, the experiment had to be postponed. Many letters have been received from Dr. Agnew, who has taken very considerable interest in the matter, and they are glad to be in a position to report that Messrs. J. A. Youl, C.M.G., and T. F. Brady, who had promised their assistance last year, have again generously offered their services. The Commissioners have every reason to hope that the Ova will be sent from England in December next.

They have recently drawn the attention of the Government to a great and pressing want which, in their opinion, materially hinders the progress of the Establishment entrusted to their care,—viz., the appointment of a Superintendent thoroughly versed in the science of pisciculture. Since the death of the late Superintendent, Mr. Ramsbottom, they have been without any skilled assistance. The office of Superintendent has, however, appeared annually in the Estimates, but without the addition of a salary. They feel warranted in strongly urging the necessity of such an officer being at once procured from Europe.

They are glad to learn from the Report of the Royal Commission on the Fisheries of the Colony, that the appointment of a skilled Inspector of Fisheries generally is recommended. Such an officer could, without difficulty, manage the Salmon Ponds with the assistance of the present staff. The Commissioners believe that his services would be of extreme value, and reproductive.

There are many matters in connection with the imported Salmonidæ which lack attention. Their habits under new conditions, and the physical obstructions to the necessary movements of the fish during the spawning season, require the study of one skilled in such matters whose time could be devoted to such a purpose.

The Commissioners have received from Mr. E. Shoobridge, M.H.A., very generous offers to construct on his estate a second fish-breeding establishment to be controlled by the Commissioners, on conditions stated by Mr. Shoobridge; and, while asking a certain contribution from the Government, he was also prepared to contribute from his private purse in a most handsome and liberal manner in aid of the salaries of a skilled Superintendent and Assistant, and he also offered to lease the necessary land for 10 years without rental.

They cannot speak too highly of Mr. Shoobridge's generosity, and his proposals have received their most earnest consideration. Looking, however, upon the matter as a State question, they felt compelled to advise the Government that, as the State would principally benefit by an establishment such as suggested by Mr. Shoobridge, it was the duty of the State to meet the necessary expenditure. The Commissioners also deemed that it would not be dignified on the part of the Government to resign its proper functions to the generosity of private individuals.

At the same time they urged the appointment of the Inspector hereinbefore mentioned, and advised the postponement of the question of construction of further breeding-ponds until the arrival of the new officer, as it was considered that his advice in such matters would be of infinite value.

They also advised that the Inspector's services should be placed freely at the disposal of private persons desirous of establishing artificial fish-breeding establishments.

The existence of such establishments in other countries has proved commercially of such enormous value to the rivers upon which they have been placed, that it may be well to dwell shortly upon the subject here. The ova and young of fish spawning in a natural manner are preyed upon by so many enemies, that it has been estimated that only 5 out of every 1000 survive.

The authority for this statement is the United States Commissioner of Fish and Fisheries, Professor Spencer F. Baird, who, in his Report for the year 1878, states that "it may safely be

assumed that 850 fish out of 1000 eggs are produced artificially, as compared with 5 in 1000 produced naturally. The ratio of production may, in round numbers, be claimed to be nearly 200 to 1 in favour of artificial production, possibly much more."

It was in 1853 that the first practical action in the way of artificial production in the United States was begun by two gentlemen, whose success was so great that, in the year 1878, there were nearly 30 States having Fish Commissioners appointed to attend to the subject.

It has been stated by a competent authority, writing on the value of Norwegian lakes for fish culture, "that fish culture will yield a profit which fully equals that from agriculture over equal areas."

To a certain extent this statement may be said to be exemplified by the experience at the Stormontfield Breeding Establishment on the River Tay, in Scotland, where, according to Mr. Robert Buist, the rental of the river remained almost stationary from 1828 to 1853, when the artificial propagation of Salmon was commenced, with a result that, from a rental of £9269 6s. 5d. in 1854, it increased to £17,618 0s. 7d. in 1865, nearly doubling the rental in 12 years. It is estimated that 300,000 young Salmon are annually added to the Tay from the Stormontfield Ponds. This result is largely attributed by the same writer to the beneficial effects of stocking the river by artificial means, such as exist upon our own establishment at the Plenty, which, by the way, was planned upon the model of Stormontfield, and which, if again placed under skilled management, will no doubt produce results similar to those obtained in other countries.

The Commissioners, learning that the Brook Trout of America (*S. fontinalis*) had been successfully acclimatised in New Zealand, lately procured from there a supply of Ova. Owing principally to an exceedingly rough voyage, the greater number of the Ova were dead on arrival, but between 100 and 200 healthy eggs were placed in a hatching-box at the Salmon Ponds,—sufficient in number, it is hoped, to produce a breeding stock.

This fish is thus spoken of by the Commissioners of Fisheries for the State of Maine in America, in their Report for 1867, as a species "very easily domesticated, and thrives wonderfully in confinement. When young it will endure without injury much rough usage. This hardy character, joined to its value in market, renders it the best of all fish for artificial breeding and rearing. In our country the efforts of pisciculturists have been almost confined to it." The species has also been introduced to the celebrated Howietoun Fishery at Stirling, in Scotland, where the Ova and Fry command higher prices than any other species of trout. They are there spoken of as being "not so predaceous as common Trout," and "are excellent eating."

	£	s.	d.	£	s.	d.
The outlay of the Salmon Ponds' Establishment for 1882 was .....				337	5	0
The income was—Sale of Ova.....	120	0	0			
Fishing Licences, season 1882-83 .....	176	10	0			
				296	10	0
Debit balance.....				£40	15	0

The Revenue and Expenditure during the last five years has been—

	1878.	1879.	1880.	1881.	1882.	<i>Five Years' Average.</i>
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
REVENUE—						£ s. d.
Sale of Ova ..	86 0 0	90 0 0	105 0 0	187 10 0	120 0 0	
Fishing Licences	129 0 0	156 0 0	191 0 0	204 0 0	176 10 0	
Total .....	215 0 0	246 0 0	296 0 0	391 10 0	296 10 0	289 0 0
EXPENDITURE ..	301 12 6	306 8 9	292 9 6	314 5 4	337 5 0	310 8 2

ROB. CAR. READ, *Chairman.*  
 HENRY BUTLER.  
 W. A. B. GELLIBRAND.  
 MATTHEW SEAL.  
 ROBT. M. JOHNSTON.  
 A. G. WEBSTER.  
 A. RIDDOCH.  
 W. TARLETON.  
 JOHN SWAN.  
 H. WEEDON.

*RETURN showing the Distribution of Ova and Fry from the Salmon and Troutling Breeding Establishment, River Plenty, during the Year 1882.*

OVA.		FRY.	
Victoria .....	14,000	Northern Rivers, Tasmania .....	1950
New South Wales .....	5000	River Plenty .....	2000
South Australia .....	5000		
Hamilton-on-Forth, Tasmania .....	3000		
	<hr/> 27,000		<hr/> 3950

PHILIP S. SEAGER, *Secretary Salmon Commissioners.*