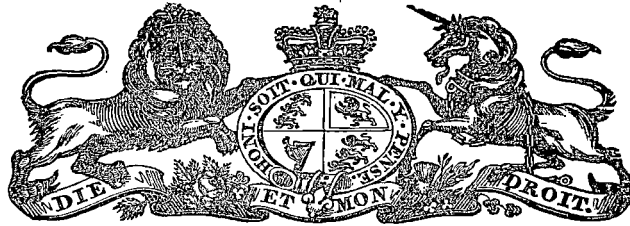


(No. 36.)



1886.

PARLIAMENT OF TASMANIA.

SALMON COMMISSIONERS:

REPORT FOR 1885.

Presented to both Houses of Parliament by His Excellency's Command.



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, dated 25th June, 1885, the Salmon Commissioners had the pleasure of recording the great success of the then recent shipment of Salmon ova per *Yeoman*, that the hatching was nearly completed, and that the living fry exceeded 36,000.

The Commissioners, after mature deliberation, determined that it would be wise to liberate the fry at the earliest age, when their instincts would prompt them to seek natural shelter from their enemies. Acting upon this determination, when the fry began to feed, the work of distribution was commenced, and upon completion 27,900 fry had been taken from the hatching boxes, a result in the highest degree satisfactory, seeing that liberal allowances were made for losses from disease and from accident. The fish were placed in various rivers, view being had to those most suitable, and the distribution was as general as the number available would admit of.

This being the first distribution of Salmon Fry throughout the rivers of Tasmania,—the former shipments having been liberated in the Plenty,—the following particulars may prove worthy of record.

On 18th August, 1000 fry were liberated in the Rivers Styx and Falls, tributaries of the Derwent, and on the same date 3000 were set free in the Derwent itself. On 17th October, 4000 more were placed in the Derwent, and on the same date 2000 in the River Plenty, a tributary of the Derwent. On 28th November, 800 were liberated in the Derwent, and on 2nd December, 150 were placed in the Plenty. River Derwent and its tributaries, 10,950 fry.

On 2nd September, 2000 fry were sent to Evandale, where they were liberated in the South Esk at Evandale Ford. Only one of these fry died during transit. On 2nd October 4000 were sent from the Ponds to Launceston: they arrived there with a loss of 70 by death. About 1600 were again liberated at Evandale Ford, and the remainder were taken to the South Esk at Hadspen. River South Esk, 6000 fry.

On the 19th September, 4000 fry were taken to Victoria, Huon. Upon arrival they were conveyed in a boat up the river about five miles, where they were liberated, 10 dying during transit. River Huon, 4000 fry.

On 23rd October, 4000 fry were sent to Launceston, and taken from thence by the Launceston and Western Railway to Kimberley's Ford on the River Mersey, where they were liberated. 40 died during transit. River Mersey, 4000 fry.

On the same date 250 fry were forwarded to St. Leonard's, near Launceston, where they were placed in charge of Mr. Charles C. Swan, who put them in a water-race on his estate, with a view to their liberation in the North Esk when they attain their smolt stage. River North Esk, 250.

As no species of Salmonidæ had ever been placed in the River Pieman, the Commissioners were desirous of attempting the stocking of that river with a view to having, in the future, an undoubtedly pure stock from which to draw supplies of ova. The attempt, however, unfortunately failed. 500 fry were sent from the Ponds on 5th November. They were taken on from Launceston per Launceston and Western Railway to Formby, thence by coach to Emu Bay, which was reached at 3 A.M. on 7th November. The can containing the fry was placed under a tap, which was turned upon them for the night. On examination a few hours later all were found to be dead, the only explanatory cause which could be suggested being that the water in the tank came from a zinc roof and that the chemical properties of the zinc had polluted the water. River Pieman, 500.

On 5th November, 2000 fry were sent by the same route as those for the Pieman. On reaching Ulverstone they were taken by boat up the River Leven about 7 miles, where they were liberated in a suitable spot. About 25 died in transit. River Leven, 2000.

River Inglis,
200.

On 2nd December, 200 fry were forwarded to Launceston *en route* to the River Inglis. Owing to some delay in Launceston many of the fish died, but about 25 large specimens were placed in the South Esk, as it was feared they would not survive the further journey. The remainder were taken from Launceston to Wynyard by the Hon. W. Moore, who bestowed great attention upon his precious charge, and he was successful in liberating 85 in the River Inglis.

Since the liberation of these fry the Commissioners have received most satisfactory proof of their progress in two of the rivers in which they were placed. Some time back an angler, fishing with a fly for herring in the Mersey at Kimberley's Ford, saw a number of fish rising. He captured several, which proved to be *S. salar*. He immediately returned the fish to the stream, and reported them to have grown considerably. A specimen unfortunately killed by another angler has been preserved in Launceston, and another was exhibited at a meeting of the Royal Society on 13th April last. Other specimens have been captured in the South Esk, near the spot where they were liberated, and they show great progress in growth and condition.

The Commissioners have the strongest hopes as to the future success of the experiment. Their only regret is, that a recommendation they felt justified in making to the Government, that at least one other shipment of Salmon ova should be procured, was not acceded to. Many difficulties heretofore met in connection with the procurement and packing of Salmon ova have, as a result of the last two shipments, been removed, and the expense attendant upon long journeys to London with the ova, to be packed there, have been found to be quite unnecessary. The evidence of the great success of the last shipment of "eyed ova," of which 80 per cent. were hatched and liberated, coupled with the recommendation of Mr. T. F. Brady that in any future shipment only "eyed ova" should be forwarded, and that they should be packed for shipment at the hatchery, together with his assurance that his services were freely at the disposal of the Commissioners, prompted them to desire to avail themselves of the proposal to ship "eyed ova" only. It seems to be a matter of regret to halt when success is so assured. To be content with what has been already done is opposed to the views of the greatest authorities in pisciculture, who recommend that, in order to ensure permanent success, the stock should be kept up by fresh importations for a period of several years.

Abingdon
smolts.

The salmon from the *Abingdon* shipment in 1884 having been reported by the Assistant at the Ponds to have assumed their smolt dress, instructions were given to permit those desirous of migrating to pass into the Plenty. Up to the end of 1885 229 had been thus liberated, and the number of those remaining at the Ponds is estimated at about 800.

30 selected fish have been placed in a separate pond to be retained until they have produced ova. They have grown well, and a successful result is anticipated.

Salmo fontinalis.

The first hatching from the shipment of this species, obtained from New Zealand, resulted in 3100 fry, which were distributed as shewn in the Return in the Appendix to this Report. At the present date the second hatching is proceeding at the Ponds, and it is estimated that 8000 to 9000 fry will be the result.

The fry are greatly in demand, and the stock at the Ponds continue to excite the admiration of all who inspect them.

Fish-pass.

The Commissioners caused a combined fish-pass and trap to be constructed on the Plenty at Redlands. The pass, which is of a very simple description, was designed by and constructed under the supervision of a Member of the Commission (Mr. M. Seal), who has had much practical experience in pisciculture. The fall at the particular point selected was deemed not to be of such importance as to require a ladder-pass, as proposed by the admirable design of Mr. Saville-Kent, referred to and illustrated in our last Report. The success of the simple structure erected is undoubted, 520 fish having been captured in three months. It is satisfactory to note that the majority were of the migratory form. The best fish were selected for artificial stripping, and, with the remainder, were afterwards liberated in the Plenty.

Fishing
seasons.

The Legislature having accepted the proposal of the Commissioners that the Governor in Council should have the power to fix the fishing seasons in relation to the several rivers of the Colony, the Regulations have been so revised that rod and line fishing has been fixed for this season from 1st August to 30th April in the estuaries of the Derwent and Huon, and from 1st September to 30th April in the other southern rivers; but, in the northern rivers, at the request of prominent anglers of that locality, the season will not open until the 1st October, as from some local causes the fish are not in condition before that date. These alterations are in some degree experimental, and will be modified if further experience shews it to be advisable.

Acknowledgment of services of Messrs. Youl, Brady, and Philpott.

In response to the application of the Commissioners, the Government placed at their disposal three complete sets of "photographic views of Tasmania." A suitable inscription having been printed on the cases containing the photographs, a copy of each was presented to our friends Mr. J. A. Youl, C.M.G., Mr. T. F. Brady, and Mr. R. Philpott, as a token of the appreciation of their generous and gratuitous services to the Colony. The receipt of these souvenirs has been acknowledged in a warm and cordial manner, which has been very gratifying to the Commissioners.

During the season the largest number possible of ova of the migratory salmonoids (*S. trutta*) have been secured, and at this date all the hatching appliances at the ponds are fully occupied. There are 130,000 *S. trutta*, 20,000 *S. fario*, and 9000 *S. fontinalis* at present in the hatching-boxes. Collection of Ova.

The demand for ova for shipment has also improved, owing to the Geelong Fish Acclimatising Society being again in a position to renew its operations. 13,000 Ova (5000 *S. trutta* and 8000 *S. fario*) will be shipped to Victoria in a few days, and a further demand for New South Wales is expected. Ova for the Colonies.

The revenue from fishing licences during last season exceeded that of any previous year, the amount collected being £215 10s. This sum might be considerably increased if a satisfactory scheme could be devised for the detection of poachers. The police have other duties to attend to, and are too limited in number to successfully repress the practice of poaching. Revenue from fishing licences.

Reviewing the work indicated in this Report, the Commissioners think they may fairly claim to have produced the most satisfactory result in the art of pisciculture which has been attained since their appointment. It is impossible to estimate the result which must accrue from the liberation of the large number of *S. salar* and other salmonidæ in our rivers; but the Commissioners can fairly trust that they have established the nucleus of what will prove to be in the not distant future a large, important, and most valuable industry. The accomplishment of this would be secured by the introduction of a further supply of Salmon ova; and the Commissioners beg to impress most strongly upon the Government the necessity for such an undertaking next year, more particularly when, as has already been pointed out, all existing difficulties heretofore encountered, both as to detail and cost, have been successfully removed. Review.

The Commissioners cannot conclude without expressing their hearty thanks to the various gentlemen who have so warmly assisted in the distribution of Salmon ova in the northern rivers. One of the most active in this direction, and who has for years worked with great zeal in the cause of acclimatisation, Mr. R. F. Irvine, of Launceston, has recently been appointed to be a Member of the Commission, which has also gained another valuable addition by the appointment of Mr. Bernard Shaw to the vacancy caused by the death of the late Mr. John Swan.

J. W. AGNEW, *Chairman.*

Hobart, 16th August, 1886.

APPENDIX.

RETURN showing the Distribution of Ova and Fry from the Breeding Establishment, River Plenty during the Year 1885.

SMOLTS (<i>S. salar</i>), Abingdon shipment.	
River Plenty	229
FRY (<i>S. salar</i>), Yeoman shipment.	
Derwent and tributaries (all placed in alive)	10,950
South Esk (71 died)	6000
North Esk (all placed in a water-race on Mr. Swan's estate, St. Leonard's)	250
River Huon (10 died)	4000
River Mersey (40 died)	4000
River Pieman (all died)	500
River Leven (25 died)	2000
River Inglis (86 put into Inglis, about 25 in South Esk, remainder died in transit)	200
	27,900
FRY (<i>S. fontinalis</i>), first distribution in Tasmania.	
Launceston (600 in St. Patrick's River, 400 in water-race at Mr. Swan's, St. Leonard's)	1000
River Styx	500
Mr. Read, Redlands	300
Sorell Creek	300
Mr. W. A. B. Gellibrand (nearly all died, a few put in River Dee)	325
Mr. A. Page (120 in ponds at Anstey Barton, remainder in Lake Sorell)	350
Campbell Town, Elizabeth River	325
	3100
OVA (<i>S. fario</i>).	
New South Wales	7500

RETURN of the Expense of the Salmon and Trout Breeding Establishment for the Year 1885.

	<i>Salaries.</i>	<i>Other Expenses.</i>	<i>TOTAL.</i>
Secretary, Superintendent's Assistant, and Water Bailiff, including conservancy of River Derwent	£ s. d. 177 7 2	£ s. d. *287 3 1	£ s. d. 464 10 3

* Includes £169 10s. 5d. special repairs to troughing.

REVENUE.

	£ s. d.
Sale of Ova	37 10 0
Fishing Licences, Season 1885-86.....	215 10 0
	<u>£263 0 0</u>

PHILIP S. SEAGER, *Secretary Salmon Commissioners.*