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**IONTAOBHAS TAIGHDE BRADAN na h-EIREANN  
IONCORPORTHÁ**

(THE SALMON RESEARCH TRUST OF IRELAND INCORPORATED)

**REPORT**

**AND**

**STATEMENT OF ACCOUNTS**



**ADMINISTRATION OFFICE**

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**FOR THE YEAR ENDED 31st DECEMBER**

**1957**



REPORT

AND

STATEMENT OF ACCOUNTS

*FOR THE YEAR ENDED 31st DECEMBER 1957*



# IONTAOBHAS TAIGHDE BRADAN na h-EIREANN IONCORPORTHA

(THE SALMON RESEARCH TRUST OF IRELAND INCORPORATED)

## Report for the year ended 31st December 1957

During the period under review the affairs of the Trust continued to be controlled by a Committee of Management which comprised Sir Hugh E. C. Beaver, K.B.E., Mr. Charles K. Mill, Sir Richard V. H. Levinge, Bart. (as nominees of the Chairman of Messrs. Arthur Guinness Son & Co. Ltd.), together with Mr. Joseph D. Rush and Dr. Arthur E. J. Went (as nominees of the Minister) in addition to Major Charles W. Roberts (as elective member). The Committee, under the chairmanship of Mr. Rush, held four meetings in the year 1957.

The post of Biologist having fallen vacant, the Committee appointed Mr. David J. Piggins, B.Sc. (previously biologist to the Yorkshire Ouse River Board), and this officer took up duty on 1st March.

The work of the Trust is still in the formative stage of survey and development of the necessary installations to carry out its long term programme of scientific investigation.

The biological survey of the catchment area of the Burrishoole River was continued during 1957. Samples of the river and lake waters, taken under known conditions, were analysed by the Chief Chemist of Messrs. Arthur Guinness Son & Company (Dublin) Ltd. Additional collections of material (e.g., scales, together with relevant data of salmon, sea trout and brown trout) from this area were also made, and a record of the results accruing from examination of such material will be duly included in a future Report. Some interesting information was likewise gathered as to the activities of predators against the salmonid fishes—e.g., coalfish taken in Lough Furnace during the run of smolts to the sea were found to contain partly digested salmonid fishes, including two of the Trust's tagged smolts, while brown trout from this area also contained salmon smolts. Furthermore, some information was collected as to the feeding habits of predatory birds, including the cormorant and heron.

It is of interest to record that on 28th July, 1957, a heron forced an entrance to one of the rearing ponds, which had been covered to prevent just such an eventuality. The bird was less than four hours in the pond before being discovered and shot. It had, in the meantime, consumed at least thirty salmon parr ranging in size from 8.0 to 11.5 cms. On another occasion an eel measuring 38 cms. entered another of the rearing ponds and overnight had consumed at least twenty-five salmon parr ranging in size from 2.0 to 3.5 cms.

As stated in our last annual report 92,000 ova of spring fish from the Cork Blackwater and 78,000 ova of grilse from the River Owenea in County Donegal were obtained in 1956 for experimental purposes. Of the fry resulting therefrom 41,000 from the spring fish and 38,000 from the grilse were placed in rearing ponds and fed on a suitable diet. Both groups of yearling fish were measured in March, 1957, and they showed a satisfactory growth rate over the winter. The larger fish had increased in length by about 4 cms. and there was an average increase in length of 2 cms. when compared with the measurements made in November, 1956. The spring fish totalled 6,110, of which 1,170, with an average length of 12.5 cms. (range 9.5 to 15.4 cms.) showing signs of smolt transformation, were tagged with a small coloured celluloid tag and released along the east shore of Lough Feeagh. The remaining spring fish, numbering 4,940 were transferred into another rearing pond, which had been cleaned and sterilised. These fish were further reared and by the end of 1957 an estimated 4,500 or about 95% had survived. The mean length was then 11.8 cms. (range 7.3 to 15.2 cms.). Assuming that these surviving parr become smolts in the spring of 1958 the proportion of one-year smolts (19.1%) is relatively high when compared with the proportion in the smaller acid rivers in the west of Ireland, where generally speaking the proportion of one-year old smolts is not more than 5% of the total. Proportions of one-year old naturally reared smolts of this order have, however, been recorded for certain rivers in Ireland,

including the River Moy for which recent scale readings of adult fish for the years 1954 to 1956, inclusive, have given figures of 13.9 to 25.2% of one-year old smolts.

Of the grilse offspring (numbering 4,173), 743 were tagged and 3,430 were fin-clipped using the left pectoral fin. All of these were subsequently released along the east shore of Lough Feeagh. The tagged fish were those which were showing signs of transforming into smolts. The average size of those tagged was 11.0 cms. (range 8.9 to 14.1 cms.) and those fin-clipped ranged in size from 5.0 to 9.0 cms.

In 1957, 51,000 ova from grilse from the Glenties hatchery and from local sources were reared at Treanlaur in one of the circular rearing ponds. After hatching, many of the alevins from Glenties hatchery were observed to have abstractions of an appreciable amount of yolk. These alevins apparently lost the yolk supply before the feeding impulse had properly developed and it is thought that as a result many alevins died of starvation. Due to the mild spring, extensive growths of algae developed in the flumes used for preliminary feeding and under these conditions a proportion of the alevins developed fin rot. At the end of June an epidemic of acute catarrhal enteritis which appears to have been associated with high water temperatures and low flows took a heavy toll of the stock. Measures were taken to combat this disease but the degree of mortality was very high and only about 2,700 (5%) survived to the end of the year reaching an average size of 6.1 cms. (range 4.3 to 10.3 cms.).

It was, unfortunately, impossible to procure ova of spring fish from the Cork Blackwater during 1957.

Kelts of salmon and sea trout from the hatchery, as well as those taken in draft nets operating in Lough Furnace—numbering in all 72—were tagged and released. During the year under review recaptures as clean fish were recorded of three salmon and three sea trout that had been tagged as kelts in previous years. Two of these salmon and one of the sea trout were recaptured in drift nets at Portacloy, on the north coast of Co. Mayo, and the remaining three fish were retaken in a draft net working in Lough Furnace. In the report for the previous year there was noted the recapture, in drift nets operating along the coast of Co. Mayo, of other fish which had also been tagged at Treanlaur.

Sir Richard Levinge, Dr. Went and Mr. Piggins attended the Fisheries Conference which was convened at London in November by the Salmon and Trout Association.

During the year the Trust entered into a number of arrangements for, *inter alia*, an exchange of publications with research organisations and similar bodies.

A major undertaking by the Trust during 1957 was the erection of an adequately equipped fisheries laboratory at Treanlaur, Newport, Co. Mayo, which was formally opened by the Minister for Lands (as the Fishery Authority) on the 15th August. It is a single storey building and comprises the main laboratory, a preparation room, a tank room, a library-cum-biologist's office, together with a dark-room and storage accommodation, etc. As current from the Electricity Supply Board's mains is not yet available in the Treanlaur area, it was necessary to install a generating plant for heating and lighting. The Generator House together with a new garage were well advanced by the end of 1957 and it is hoped that the Laboratory, as a whole, will have been functioning satisfactorily by the time this present report has been printed and circulated. It has been named "THE FARRAN LABORATORY" after the late George Philip Farran (Chief Inspector of Fisheries 1938 to 1946), an outstanding scientist in the domain of fishery research. The Committee were very pleased to have his son, Mr. G. C. Farran, among their guests at the opening ceremony. Special tribute is due to Mr. R. L. Burgess, Senior Architect to Messrs. Arthur Guinness Son & Co. (Dublin) Ltd., for having designed a building so suitable for the work of the Trust; while special mention falls to be made of the contribution by Major C. W. Roberts by whom local labour was mobilised and supervised for the actual constructional work, as well as Mr. R. W. Hall of the Engineering Staff of Messrs. Arthur Guinness Son & Company (Dublin) Ltd., who was in immediate charge of the operations.

(Signed) JOSEPH D. RUSH,  
Chairman.

Dated 28th February, 1958.



Salmon Fry in the Rearing Pond

Dr. A. E. J. Went, Director of Research, discussing the Rearing Pond

with Mr. Erskine Childers, Minister for Lands, Mr. M. O'Moráin,

Minister for the Gaeltacht

and members of the Trust.

The Laboratory is seen on the right

Photographs taken on the occasion of the  
official opening on  
15th August 1957,  
of the  
Trust's Laboratory at Treenlaur, Newport, Co. Mayo  
by the  
Minister for Lands (as the Fishery Authority).





na h-EIREANN IONCORPORTH  
OF IRELAND INCORPORATED)

year ended 31st December, 1957

Year								
1956							£	s. d.
£								
3,000	Income under Covenant by Arthur Guinness Son & Co. Ltd.	...	3,000	0	0			
613	Contribution from Department of Lands (one-third of expenses £2,399 19s. 1d.)	... ..	799	19	8			

£3,613

£3,799 19 8

AT

31st DECEMBER, 1957

31/12/56

The Company is entitled to £3,000 per annum under a ten-year Covenant from Arthur Guinness Son & Co. Ltd. (First Payment 1st August, 1955)

£	FIXED ASSETS:		<i>Original Cost</i>	<i>Depreciation</i>		
538	Hatchery and Fish Pond	... ..	£566 9 5	£55 9 5	£511 0 0	
246	Plant and Scientific Equipment	... ..	454 2 10	70 2 10	384 0 0	
	Furniture and Fixtures	... ..	309 17 6	30 17 6	279 0 0	
94	Motor Car	... ..	1,030 0 0	257 0 0	773 0 0	
878			£2,360 9 9	£413 9 9	£1,947 0 0	
	CURRENT ASSETS:					
613	Due by Department of Lands	... ..		799 19 8		
39	Expenses prepaid	... ..		13 5 0		
1,275	U.K. Income Tax recoverable	... ..				
	Cash at Bank and on Hand:					
549	Current Accounts	... ..		325 12 2		
1,500	Deposit Account	... ..	£3,250 0 0			
2	Interest accrued due	... ..	53 19 2			
	On Hand	... ..		3,303 19 2		
				2 2 1		
					4,444 18 1	
£4,856					£6,391 18 1	

Signed JOSEPH D. RUSH, *Chairman.*

R. H. V. LEVINGE, *Member of Committee.*

I have obtained all the information and explanations which I have required. In my opinion and correct view of the state of the Company's affairs, according to the best of my information

G. W. O'BRIEN,

Chartered Accountant, Public Auditor.