SALMON AND TROUT FARMING IN SCOTLAND
REPORT OF DAFS ANNUAL SURVEY FOR 1984

Responses to a Departmental questionnaire from all known Scottish salmon and rainbow trout farming companies are summarised in the following paragraphs and attached tables 1-4. The cooperation of the fish farming industry in completing these questionnaires is gratefully acknowledged.

Rainbow Trout

Returns received from 56 companies (63 in 1983) operating 76 farm sites (82 in 1983) predominantly in the central and southern areas of Scotland show that trout production reached 2082 tonnes, compared with 2009 tonnes in 1983, of which some 146 tonnes (147 tonnes in 1983) were used for restocking angling waters.

Comparison by system of production between 1983 and 1984 showed that freshwater cage production increased by 11%, pond production by 5% and sea water cage by 19%; tank production dropped by 26%.

The returns show that some 37 companies each produced 25 tonnes or less comprising 18% of the total production. Six companies operating 9 sites produced 988 tonnes or 47% of total Scottish production.

Purchase and sales of fry/fingerlings were both down by 7% and 8% respectively. Sales were less than purchases showing again a net insufficiency of Scottish supplies.

A total of 20.4 million ova were laid down for hatching in 1984 (11.2 million in 1983) comprising 7.6 million from UK sources and 12.8 million from foreign sources.

Total manpower employed was 180 (12 less than in ~~1982~~ 1983) of whom 66 were part-time staff.

Atlantic Salmon

Returns received from 67 companies (49 in 1983), operating 46 freshwater and 83 seawater sites (41 and 62 respectively in 1983), showed that production was

3912 tonnes (2,536 in 1983) of which 2697 tonnes (69%) were salmon and 1215 tonnes were grilse (1689 and 847 tonnes respectively in 1983). The mean weights of salmon and grilse were 2.55 and 1.66 kg respectively.

The lower average weight of fish harvested as salmon reflects harvesting of fish destined to be salmon before or during their second sea winter. The increased number of the 1983 smolt intake so harvested makes estimation of an accurate survival rate and of production in future years very difficult. However production in 1985 is likely to be of the order of 4,800 tonnes.

This increase will to some extent reflect the increase in smolt production by 25% from the previous year. The proportion of S1 smolts was 85% (80.4% in 1983) reflecting a continued increase in efficiency in smolt production. Smolt sales were over 40% of total production compared to 36% in the previous year. A small number were sold to Norway.

The number of ova laid down was 14.9M, the same as in 1983. This may reduce the rate of increase in production in 1986 but a continuing increase in production should be expected then and in later years. The ova used came from own broodstock 59%, other Scottish farmed broodstock 20%, wild fish 6% and imports from Norway 15%.

Table 4 shows that 5 companies produced 2571 tonnes or 66% of the total farmed salmon production whereas 29 companies produced only 49 tonnes or 1.3%. Most of the latter are of recent origin and their production can be expected to increase significantly in future years.

Total manpower employed was 515 (372 in 1983) of whom 125 (89 in 1983) were employed part time.

There were 188 shipments carrying appropriate health certificate of freedom from VHS virus and the agent of Whirling Disease comprising 87 tonnes of chilled salmon carcasses (42 shipments comprising 8 tonnes in 1983) sent to the USA.

DAFS

Copies sent to SNFU
ASDSFB
HIDB
MAFF
SDD
CEC
All fish farmers

Table 1

RAINBOW TROUT SURVEY 1984

NO OF COMPANIES
56

NO OF SITES
76

STAFF

Full-time	Part-time	Total
114	66	180

EGG SOURCES AND NUMBERS ('000)

Own broodstock	Other UK farms	Foreign	Total
4,482	3,183	12,735	20,400

FRY/FINGERLING PRODUCTION ('000)

Bought	Sold
5,932	5,329

PRODUCTION (tonnes)

Table	Restocking	Total
1,936	146	2,082

Table 2

Analyses of Rainbow Trout Farm Sites by Site Systems and Scale of Production

System	Production (tonnes) 0	<10	10-25	26-50	51-100	>100	No of Sites	Tonnes
Ponds	0	9	10	7	3	1	30	866
Tanks	9*	6	4	0	2		21	197
FW Cages	1	5	5	1	1	4	17	932
SW Cages	2	1	5	0	0	0	8	87
							76	2082

* Many tank sites are used for fry/fingerling rearing and in consequence tonnages are not recorded for these sites.

ATLANTIC SALMON SURVEY

Table 3

NO OF COMPANIES

07

STAFF

Full-Time	Part-Time	Total
387	128	515

NO OF SITES

Freshwater			Seawater			
Tanks	Cages	Total	Tanks	Cages	Total	Total FW + SW
38	8	46	11	72	83	129

EGG SOURCES AND NUMBERS ('000)

SCOTTISH FARMS				
Own broodstock	Other farms	SCOTTISH WILD SALMON	FOREIGN	TOTAL
8,760	2,897	956	2,270	14,883

SMOLTS IN SEAWATER ('000)

SI	S2	Total
3,085.5	542.5	3,628

SMOLTS SOLD

S1	S2	Total
1,150	295	1,445

PRODUCTION

GRILSE		SALMON		
Nos ('000)	Tonnes	Nos('000)	Tonnes	Total (tonnes)
730	1,215	1,059	2,697	3,912

Table 4 How production is distributed between salmon farming companies.

Production (tonnes)	0	<10	10-25	26-50	51-100	101-250	>250	
No of Companies	18	11	9	4	-	3	5	57
Cumulative Tonnage	0	48.75	146.8	165	493.5	486.7	2570.8	3911.6
% of total production	-	1.3	3.8	4.2	12.6	12.4	65.7	