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The Length, Weight and Age Composition of the Salmon Catch
from the River North Esk (Scotland) from 1962 to 1966.

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At their meeting in Hamburg in October 1967, the Joint Working Party asked member countries to provide information on the length, weight and age composition of their salmon catches. As a first contribution towards the provision of this information for Scottish salmon catches, this report gives the appropriate data for the commercial salmon catches taken on the River North Esk from 1962 to 1966. Steps are being taken to extend these observations to other important Scottish salmon rivers in 1968 and subsequent years.

Since 1962, the net and coble catch on the North Esk has been sampled on one or two days each week throughout the commercial fishing season, which extends from 16th February to 31st August. Except during February, March and April 1962, when only a proportion of the catch on the appropriate days was sampled, the complete catch taken during each sampling period has been examined. Scale samples were taken from each fish and its fork length and weight recorded. The proportion of the total annual catch sampled was 8% in 1962 and varied from 21% to 25% from 1963 to 1966.

The values given here are for salmon only, the distinction between salmon and grilse being made on the basis of scale reading and not on the usual criteria employed by the fishermen. Table 1 gives the age composition for each year and the overall age composition averaged for the five years 1962-1966, while Table 2 shows the monthly distribution of the various age groups averaged over the five-year period. Tables 3 and 4 give the average lengths and average weights for each year and the overall values averaged for the five year period, while Tables 5 and 6 show five year average values for these parameters for each month in each age category.

Table 1 Percentage Age Composition, Commercial Salmon Catch
River North Esk, 1962-1966

<u>Age</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>Overall</u>
1.2	1.3	2.2	2.0	0.2	0.7	1.3
1.3	-	0.3	0.5	0.7	0.1	0.4
2.2	30.8	60.5	62.2	53.0	34.6	50.6
2.3	5.9	2.1	5.8	8.9	8.1	66.2
2.4	-	0.2	-	-	0.1	0.05
3.2	49.4	29.9	25.9	31.7	47.3	35.3
3.3	5.1	1.0	1.5	1.9	3.2	2.1
4.2	2.9	1.3	0.2	0.2	3.5	1.5
4.3	0.8	-	0.1	0.1	-	0.05
Previous Spawners	3.8	2.5	1.8	3.3	2.4	2.5

Table 2 Average Monthly Percentage Age Composition, Commercial Salmon Catch,
River North Esk, 1962-1966

<u>Age</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>
1.2	0.4	0.5	0.3	0.8	2.1	3.3	5.6
1.3	0.3	0.4	0.8	0.4	0.1	0.1	-
2.2	31.5	39.4	46.6	61.4	63.5	65.7	75.1
2.3	11.1	10.3	7.5	3.1	1.5	0.6	2.2
2.4	0.2	-	0.1	0.0	-	-	-
3.2	45.6	40.7	38.5	31.6	30.8	25.1	12.1
3.3	4.8	4.0	2.1	0.5	-	-	-
4.2	3.0	2.1	1.6	0.5	1.1	0.8	-
4.3	0.2	0.1	0.1	-	-	-	-
Previous Spawners	2.9	2.5	2.4	1.7	0.9	4.4	5.0

Table 3 Average Fork Length (cm), Commercial Salmon Catch,
River North Esk, 1962-1966

<u>Sea Winters</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>Overall</u>
2	76.0	74.3	71.8	72.7	73.4	73.2
3	92.0	87.2	88.4	86.4	87.0	87.4
4	-	104.0	-	-	100.0	102.7
Previous spawners	78.1	79.5	75.0	79.6	79.8	78.9
Overall	77.9	74.9	73.1	74.5	75.1	74.6

Table 4 Average Weight (kg), Commercial Salmon Catch,
River North Esk, 1962 - 1966.

<u>Sea Winters</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>Overall</u>
2	4.7	4.5	3.9	4.2	4.3	4.3
3	7.2	7.4	7.4	6.9	7.2	7.2
4	-	12.2	-	-	9.1	11.2
Previous spawners	4.8	5.5	4.6	5.4	5.6	5.4
Overall	5.0	4.7	4.2	4.6	4.6	4.5

Table 5 Monthly Average Fork Length (cm), Commercial Salmon Catch,
River North Esk, 1962-1966

<u>Month</u>	<u>Sea Winters</u>			<u>Previous Spawners</u>	<u>Overall</u>
	<u>2</u>	<u>3</u>	<u>4</u>		
February	69.9	86.9	102.0	81.6	73.0
March	70.4	87.3	-	82.1	73.8
April	71.7	88.1	104.0	83.6	73.7
May	73.2	88.4	-	79.6	73.9
June	75.7	88.3	-	76.6	75.9
July	77.5	91.6	-	68.6	77.3
August	82.3	87.4	-	79.3	82.2

Table 6 Monthly Average Weight (kg), Commercial Salmon Catch,
River North Esk, 1962-1966

<u>Month</u>	<u>Sea Winters</u>			<u>Previous Spawners</u>	<u>Overall</u>
	<u>2</u>	<u>3</u>	<u>4</u>		
February	3.6	7.0	10.3	5.8	4.3
March	3.7	7.1	-	5.7	4.3
April	3.9	7.4	12.9	6.2	4.3
May	4.3	7.5	-	5.4	4.5
June	4.8	7.6	-	4.8	5.0
July	5.1	7.9	-	3.4	5.0
August	6.1	6.7	-	6.1	6.1