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Size and age data for Atlantic Salmon
from West Greenland and Canadian fisheries

by

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1. Increase in weight between West Greenland and Canada

Average length and weight data for Atlantic salmon taken at West Greenland fisheries in 1968 to 1970, in the Labrador Sea in April 1970, and in selected Canadian fisheries in 1969 and 1970 are presented in Table 1. Data from West Greenland in 1969 and 1970, and in the Labrador Sea in April 1970, are separated as North American and European on the basis of serum protein analyses. Data from tagged North American and European fish, recovered at West Greenland in 1969, are included for comparison. All West Greenland data are of the one-sea-year age group; all Canadian data of the two-sea-year age group.

Direct comparisons of average gutted weight at West Greenland and in selected Canadian fisheries are possible from 1968 to 1969 and from 1969 to 1970. The increase in gutted weight from West Greenland in 1968 (presumably mixed North American and European fish) to the Miramichi area in 1969 (Table 1, lines 1 and 3) is 1.18 Kg or 46.7%. The increase from 1969 at West Greenland (biochemically identified North American fish) to the Miramichi area in 1970 (Table 1, lines 4 and 11) is 1.27 Kg or 45.5%. These estimates are virtually identical to those contained in the first report of the Joint Working Party on North Atlantic salmon.

It may be noted that there is virtually no change in average gutted weight between West Greenland in autumn and the Labrador Sea in spring (Table 1, lines 4 and 7, 5 and 8); for all data combined there is in fact a slight decrease in weight (Table 1, lines 6 and 9).

Average weights of European fish, whether biochemically identified (Table 1, lines 4 and 5, 7 and 8, 12 and 13) or tagged as smolts (Table 1, lines 15 and 16), are invariably higher than weights of North American fish. Average weights of tagged fish recovered at Greenland in 1969 were lower than those for non-tagged individuals; by 0.36 Kg for North American specimens (Table 1, lines 4 and 15), and by 0.42 Kg for European specimens (Table 1, lines 5 and 16).

2. Size and age of salmon taken by research vessel in 1970

The age-length key for salmon taken in the Labrador Sea and at West Greenland in 1970 by the research vessel *A. T. Cameron* (drift nets) is presented as Table 2. Overall, the data were fairly similar to those reported previously for 1969 drift net catches, with the exception of average smolt age. Comparisons are given below.

	Average Fork Length			Proportion 1 Sea Year	Average Smolt Age
	1 Sea Year	2 Sea Years	All Fish		
1969	66.6	76.3	67.0	96.1%	2.8
1970	66.5	78.9	67.2	93.7%	2.3

Table 1. Average fork length and gutted weight data from West Greenland and selected Canadian salmon fisheries.

Area	Date	Group	Sea Age	No. of Fish	Av. Fork Length	Av. Gutted Weight (Kg)
(1) West Greenland	Sept-Oct 1968	-	1	478	63.5	2.53
(2) SW Nfld	May-June 1969	-	2	80	67.7	3.11
(3) Miramichi	June 1969	-	2	90	70.3	3.71
(4) West Greenland	Sept-Oct 1969	BNA	1	96	65.5	2.79
(5) "	"	BE	1	125	68.1	3.23
(6) "	"	Combined	1	221	67.0	3.04
(7) Labrador Sea	April 1970	BNA	2	11	69.9	2.84
(8) "	"	BE	2	12	71.2	3.02
(9) "	"	Combined	2	23	70.6	2.93
(10) SW Nfld	May-June 1970	-	2	86	72.6	3.90
(11) Miramichi	June-July 1970	-	2	240	73.1	4.06
(12) West Greenland	Sept-Oct 1970	BNA	1	76	66.0	2.71
(13) "	"	BE	1	87	68.9	3.10
(14) "	"	Combined	1	163	67.6	2.92
(15) West Greenland	Autumn 1969	TNA	1	146	62.9	2.43
(16) "	"	TE	1	19	65.8	2.81

BNA, BE = Biochemically identified North American, European
TNA, TE = Tagged North American, European (tagged as smolts)

Table 2. Atlantic Salmon age-length key, Labrador Sea and West Greenland, 1970 (research vessel drift net catches). SY = sea years.

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