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Geographical and Seasonal Distribution of
the Danish Offshore Salmon Fishery at West Greenland
in 1971

by

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In the 1971-season 11 Danish vessels participated in the offshore salmon fishery in West Greenland waters. The fishery was carried out exclusively by means of drift nets.

The nets operated were of varying efficiency which cannot be ignored when catch-per-unit-effort figures are considered. The main reason for the variance is difference in mesh size, but also diversity of rigging is responsible.

While 8 vessels started the fishery 1 August and left off in mid or late October, 3 participants did not enter the fishery until the last half of August or mid September. In return 2 of these continued fishing until early November.

A significant part of the fishery was concentrated within the 3 miles fishing limit. Only in a few cases Danish vessels tried drift netting farther offshore than 30 naut. miles.

On basis of diaries from 9 vessels representing 89 % of the Danish total yield it is attempted to give an idea of the geographical and seasonal distribution of the Danish drift net fishery and to give estimates on the relative density of the salmon stock. For this purpose data on effort and catch are compiled according to a classification on areas and periods.

The salmon fishing season is divided in 7 half-monthly periods; - as far as the Danish vessels are concerned the season lasted from 1 August to 8 November.

The salmon fishing grounds off West Greenland have been grouped within 6 areas along the coast from Disko in the north to Julianehåb in the south, Fig. 1. By preference deeps between offshore banks, separating fishing grounds, where salmon fishing were concentrated, are selected as northern and southern limits of the areas. The exact limits are defined by the latitudes stated in Fig. 1 where also the line running at a distance of 30 naut. miles from the shore is shown. As stated above only few nets were operated outside this limit.

The areas are referred to by the following common fishing grounds:

- I Disko Bank and coastal bank east of Disko.
- II Store Hellefisk Bank.
- III Lille Hellefisk Bank.
- IV Sukkertoppen Bank and Fylla Bank.
- V Fiskenss Bank and Dana Bank.
- VI Coastal bank east and south of Arsuk.

In Table 1 effort data (number of net x sets) and catch data (number of salmon netted) from 9 vessels are grouped according to time and location of fishing. Corresponding figures on catch per unit effort (number of salmon caught per 100 nets x sets) are stated too.

In order to facilitate the survey on the various values a graphical representation of the table is drawn up, Fig. 2. Effort is represented by a square (5 mm x 5 mm: 400 nets x sets) and catch is indicated by a hatched area (5 mm x 5 mm: 400 salmon). The relation between the size of the two signatures is a direct measure of catch per unit effort; e.g. a completely hatched square represents a catch of 100 salmon per 100 nets.

Table 1. Distribution by areas and periods of effort, catch and catch per unit effort of 9 Danish vessels drift-netting at West Greenland in 1971. (f: number of nets x sets, c: number of salmon, c/f: number of salmon per 100 nets x sets).

Areas	Periods						Total per area
	August		September		October		
	1 - 15	16 - 31	1 - 15	16 - 30	1 - 15	16 - 31	
I	f		400	4300	1600	400	6700
	c		218	3268	620	24	4130
	c/f		55	76	39	6	52
II	f		5500	900	18306	12970	44376
	c		3084	424	14971	3041	25097
	c/f		56	47	82	23	57
III	f		44473	15322	31631	2400	145423
	c		49793	14516	5203	315	136651
	c/f		112	95	35	13	24
IV	f		2200	3000	1100		12700
	c		1781	2957	456		12317
	c/f		81	99	41		27
V	f		500	4300	3700	200	10400
	c		162	3028	2792	7	7886
	c/f		32	82	75	4	76
VI	f			8021			8021
	c			7060			7060
	c/f			88			88
Total per half- months	f	43891	53073	35843	37931	15970	227620
	c	41251	55038	32053	37157	3387	193141
	c/f	24	104	89	98	21	85

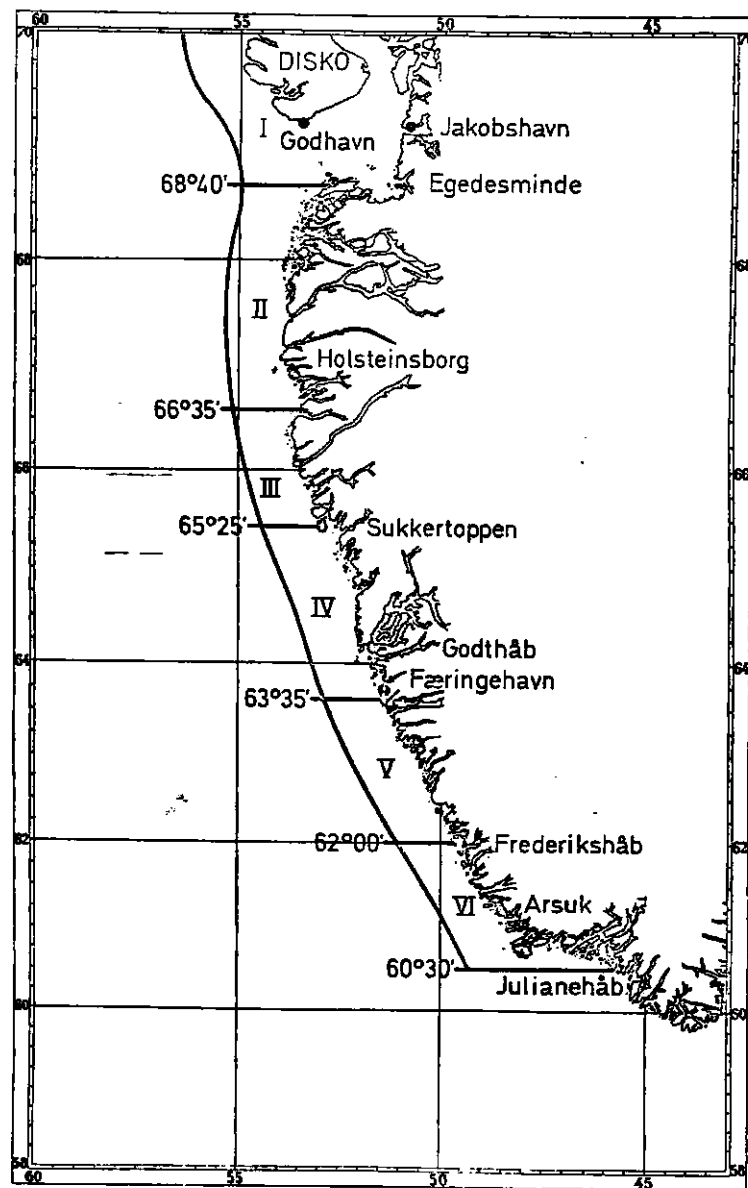


Fig. 1. Geographical division of the offshore salmon fishery at West Greenland in 1971.

1-15 AUG.

16-31 AUG.

1-15 SEP.

16-30 SEP.

1-15 OCT.

16-31 OCT.

1-8 NOV.

I

II

III

IV

V

VI

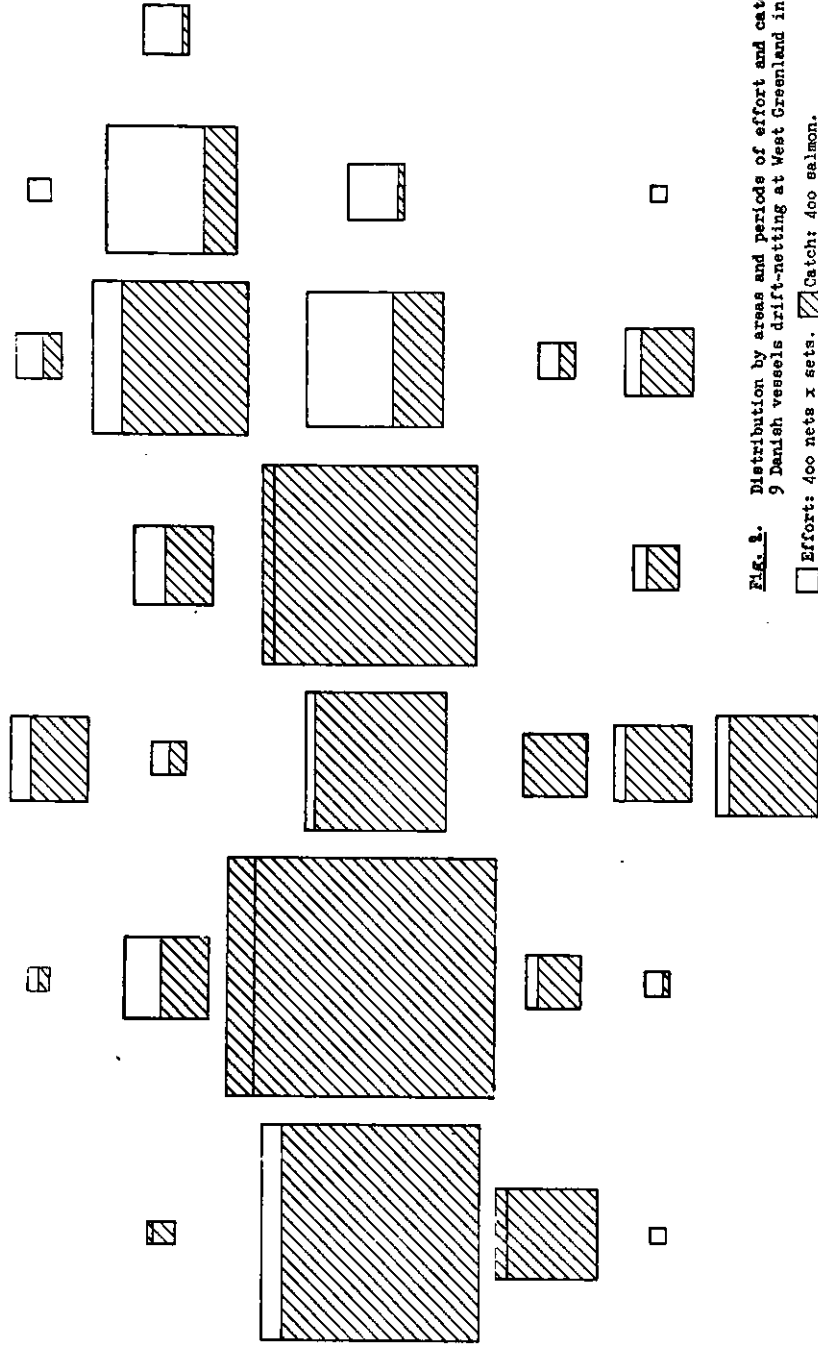


Fig. 1. Distribution by areas and periods of effort and catch of 9 Danish vessels drift-netting at West Greenland in 1971
 □ Effort: 400 nets x sets. ▨ Catch: 400 salmon.