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Conversion Factors and Figures for Utilization of Cod (*Gadus callarias* L.)1. Introduction

In recent years experiments have been carried out by the member countries of ICNAF to determine the conversion factors from landed weight to weight of round fresh fish, to be used in the preparation of the fisheries statistics from the Convention Area.

Portuguese experiments of this kind (for cod) were started in the 1953 fishing campaign. They were limited to the study of the cod as this is the only species fished intensively by the Portuguese fleet in the area. The results obtained were discussed and published by Figueiredo (1954 a, b and c).

In the first of these papers, Figueiredo (1954 a) notes that there exist "slight differences between the mean values of the conversion factors for cod in Greenland waters (the Davis Strait) and off Newfoundland. The highest conversion factor was found in the area off Newfoundland". The average value for Greenland was 2.62 (17 experiments) and for Newfoundland 2.92 (19 experiments). The overall mean was 2.77. Figueiredo had no opportunity to study the effect on the conversion factors of the position of the fish in the hold during the time between salting and landing, nor of the chemical composition of the salt used. Figueiredo concluded that the conversion factors "do not seem to be correlated with the size of the fish".

In his second paper (1954 b), Figueiredo showed the existence of an agreement between all the results obtained in Subareas 1, 2 and 3, except values for livers. The conversion factor found for Subarea 2 cod was 3.01 (11 experiments). The mean conversion factor for cod for all three subareas was 2.84.

In relation with "The Portuguese Investigations in the ICNAF Area in 1954" (anon. 1955), we summarize the main results obtained from the analyses of questionnaires from the campaign of 1954 are a conversion factor of 2.9 for cod from the Newfoundland area (24 samples) as well as for cod from W. Greenland (35 samples).

The results obtained in the 1955 campaign derive from a series of weighings of homogeneous samples of small, medium and large fish, carried out by the author or by his collaborators; they were published in a preliminary form by Ruivo (1956). In this paper a certain variability of the conversion factors is described. Apparently there is no correlation with the position of the samples in the hold or with the length of the salting period. However, there seems to be a certain tendency for the conversion factors to increase with the mean size of the fish in the samples.

2. Material and Methods

Two different methods were used to obtain the data for the present investigation: (1) The compilation of the data from questionnaires of the same form as those described by Figueiredo

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(1954 a), distributed to the captains of the cod fleet before leaving the home ports and collected after the end of each campaign (Series Q); (2) weighings carried out directly by the author or by his assistants on board the trawlers and the dory vessels (Series D).

Each questionnaire deals with a sample of approximately 100 kg. of fresh fish, as coming from the sea.

The validity of the figures furnished by the questionnaires depends on the degree of accuracy with which the weighings were made. Weighing is difficult work on board a fishing vessel during fishing operations often under bad weather conditions, and at times with scales which are not fully effective. Also the material itself is in certain ways incomplete through loss of blood and stomach contents, etc.

Of the terms used in the text, it is felt sufficient to define only "indeterminable loss" and "total recoverable". All the other terms are self-explanatory.

The "indeterminable loss" represents the difference between the weight of the fresh fish as coming from the sea and the sum of the separate parts weighed during the curing (heads, livers, gonads, intestines, third anterior part of vertebral column and the body of the fish ready for salting). The "total recoverable" includes the weight of the fish ready for salting plus the weight of those parts which are currently used or which could be used (liver, air bladder and third anterior part of the vertebral column). The weight of cheeks and tongues are not included as only rarely were the respective figures available, differing in this point from the method used by Figueiredo (1954 a). Thus the value of "total recoverable" is only approximate.

The real weight of the sample of fresh fish is only rarely exactly 100 kgs. This becomes evident from the values obtained for "indeterminable loss". In the experiments, the indeterminable loss reaches, in certain samples, as high as 15 kg. (positive or negative), assuming that the weighings of the various parts are accurate. The figures for yields and conversion factors are directly affected by this initial error in the weighing of the samples.

In order to check the data obtained from the questionnaires and, at the same time, to evaluate the effect of the size of the fish on the conversion factor, a series of experiments (Series D) was carried out on board the dory vessel "Capitão João Vilarinho" and the trawler "Alvaro Martins Homem" in 1955. The weighing of the samples and of the parts resulting from the curing operations were made under our own control. Instead of heterogeneous samples characterized only by the most frequent lengths (modes) of the fish, we used samples as homogeneous as possible of small, medium or large cod, placed in various levels of the hold - at the bottom, in the middle or in the uppermost layer. It should be noted that in this series the figures for "indeterminable loss" were always positive, which indicates that the initial weights noted for these samples were never smaller than their actual weights.

The data collected in the course of the 1954 and 1955 campaigns (Series Q and D) were used for the preparation of this paper. This data, which amounted to a total of 13,300 kg. of cod and included six series of experiments, was distributed as follows:

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<u>Greenland</u>	- G1 - 1954 (Q): 35 samples, 3,500 kg. (Table VI)
	G2 - 1955 (Q): 30 samples, 3,000 kg. (Table VII)
	G3 - 1955 (D): 15 samples, 1,500 kg. (Table VIII)
<u>Newfoundland</u>	- TN1 - 1954 (Q): 24 samples, 2,400 kg. (Table IX)
	TN2 - 1955 (Q): 22 samples, 2,200 kg. (Table X)
	TN3 - 1955 (D): 7 samples, 700 kg. (Table XI)

All questionnaires or experiments with dubious or incomplete data were discarded and not included in the tables. Particularly all samples with an "indeterminable loss" over ± 10 kg. were eliminated, as this would indicate an error in the initial weight of the samples of around 10% or more.

3. Data on Yield and Conversion Factors

The data from the various samples are given in detail in Tables VI-XI. The maximum, minimum and mean figures for these series and the observations of Figueiredo (1954 a) from Subareas 1 and 3 (1953) are summarized in Tables I and II. Table III gives the data collected from the Labrador (1953) by Figueiredo (1954 b). No observations are available for the Labrador from 1954 nor 1955.

The observations from Subareas 1, 2 and 3 will be discussed together, principally on the basis of the averages obtained.

The number of days in the hold varies enormously within samples from the same subarea by up to 150 days. One would suppose that such a great difference would affect the proportion lost during storage in the hold, and consequently the conversion factors. The data at our disposal do not reveal any clear influence of this kind. This is thought to be due to the interference of other factors (different position of the samples in the hold, different size of fish used, etc.).

The weight of salt used (Fig.1a) in Series Q was around 20 kg. per 100 kgs. of round fresh cod in Greenland and Newfoundland (1953-54-55). In Series D the weight reaches a mean value of 35 kgs. for these subareas (1955). In Labrador (1953) the mean weight of salt was 13 kg.

It is possible that the high value found for Subareas 1 and 3 in Series D in which direct weighings were made was due solely to a more accurate weighing of the salt. However, this high value can also be related to the fact that in these experiments larger fish were normally used (mean length of cod in Series D: Greenland, 87.8 cm.; Newfoundland, 101.0 cm.)

Figueiredo (1954 a) is of the opinion that the smaller quantity of salt used in the Labrador samples could be related either to a difference in the technique of salting using a different quality of salt, or to the different season of the year in which the experiments were carried out.

The weight of the heads (Fig.1b) is on the average 20% of the weight of the fish as coming from the sea, with exception of the data from 1953 in which the percentage is clearly less, ca. 7% for Greenland and Newfoundland and around 15% for Labrador. The smaller values obtained for Subareas 1 and 3 in 1953 are in some cases due to the whole heads being weighed, whereas in others only the recoverable part of the head (cheeks and tongues) was weighed, refer Figueiredo (1954 a).

From our data (Series D), one can conclude that the weight of the heads, per sample, has a tendency to increase with the mean

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size of the fish (Tables VIII and XII, Fig.2). This could explain the smaller value found for Labrador, a region where cod are normally smaller (mean value of most frequent length 66.0 cm.).

The weight of livers (Fig.1c) is about 5% of the weight of the fish as coming from the sea in all the series except that from Labrador (1953) where it is slightly more (ca. 8%). According to Figueiredo (1954 b), this value can be due to the fish having been "captured in the months of October and November, this being in a season much more late in relation to the spawning period than for the fish caught in Subareas 1 and 3". This interpretation is not in accordance with Thompson's (1943) opinion about the spawning period of cod in that region, which he states to be in September and October.

This explanation cannot be applied to the observations in 1954 and 1955 because these series include numerous samples taken in Subareas 1 and 3 in the last months of the year, without the mean value of the weight of the livers showing any significant difference at all.

The yearly variation in weight of the liver, in fish of various stocks, is an element of the greatest interest from an economic and biological viewpoint, but the study of this question is outside the scope of this paper.

The weight of the gonads (Fig.1d) constitutes, when all samples are taken together, a small fraction of the initial weight of the samples, varying between 1 and 3%. These rather low values correspond to the fact that the major part of the samples comprised fish in the recovering state or in sexual repose and only rarely of fish in full reproduction.

The weight of the intestines (Fig.1e) makes up 6-9% of the fresh, whole fish in the observations from 1954-1955, but in the series studied by Figueiredo in 1953 the figure reached around 13%. The weight of intestine per 100 kg. of round fresh fish exhibits great variations with an amplitude of from 2 to 25 kgs. between individual samples (Tables I, II and III). The weight of the intestines contributes largely to the total weight lost during splitting and gutting. The big irregularity is explained partly by the stomachs being more or less full of food, and the loss of food always possible during the weighings. The disparity which is observed in the mean values between the series of 1954-1955 and those of 1953 can correspond with the fact that in these last samples, the rest of the heads after the removal of cheeks and tongues were weighed together with the intestines.

The weight of air bladders (Fig.1f) shows a great uniformity through the samples. The mean values obtained are between 1 and 1.5%.

The weight of the third anterior part of the vertebral column (Fig.1g). The mean values show little variation within the various series (around 5%).

The weight of the body ready for salting, i.e. when placed in the hold, (Fig.1h) represents approximately 60% of the weight of the fish as coming from the sea. The mean value obtained for Labrador (1953) is slightly lower (55%).

The conversion factor from weight ready for salting to round fresh is between 1.7-1.8 (mean values). The data collected in 1955
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through direct weighings (Series D, Tables VIII and XI) suggest that this factor has a slight tendency to increase with the size of the fish (observations from Greenland). However this tendency is not apparent in the Newfoundland data, perhaps due to the small number of samples. It is possible that this phenomenon is related to the increase in the weight of the heads with increasing length of fish (Fig.3 and see page 3-4).

The difference between the weight as ready for salting and the weight as landed (Fig.1h) is 40% of the weight of the fish as ready for salting. Contrary to what could be expected, we have not found any correlation between this figure and the length of the salting period in the hold, the position of the samples in the piles or the mean length of fish used. This could result from a mutual interference of these various factors.

The total recoverable weight (Fig.1i) in the series from 1954-1955 is around 70% of the round fresh weight of the fish. It is a little higher (77-82%) in the material from 1953, due to the inclusion of the cheeks and tongues. The mean figures for "total recoverable" are only approximate, as in some series the cheeks and tongues are not included, whereas it includes the weight of the first third of the vertebral column, which is not always used.

The conversion factor for green salted cod (as landed) to round fresh weight varied from 2.0 to 4.0. These values, when considered individually, represent appreciable differences from one sample to another (Tables VI-XI).

Let us try to find out if the variation in the conversion factor reveals any correlation with the date of capture, the number of days in the hold, the position in the pile (indicating also the pressure to which they have been subjected), the mean size of the fish (Series D) or the most frequent size (Series Q). When all the experiments are considered, a certain irregularity in results is found. Only in the case of the experiments carried out by direct weighings of homogeneous samples was it possible to find a certain tendency for the conversion factors to increase with the mean size of the fish (Fig.4). This has already been dealt with in a previous paper (Ruivo 1956). In the case of the heterogeneous samples (Series Q), which are each made up of individuals differing considerably in size, there is a very irregular variation due certainly to phenomena of compensation.

We are convinced that the other elements earlier referred to (selection of samples, technique of weighing and of salting, etc.) can to a greater or smaller degree influence the values of the conversion factors. However, this action may to a certain degree be masked by their mutual inter-action.

From the loss per day in hold, one can conclude that in cases when the salting is of short duration exceedingly high values are attained (for example, around 1,900 grams in two weeks, Greenland TN2), decreasing gradually, with a tendency to be stabilized.

A thorough study of the phenomena supposed to influence the loss between salting and landing will call for experiments that are very cautiously planned, and difficult, perhaps even impossible, to carry out on board vessels which are in the act of fishing. Furthermore, it does not seem necessary to achieve such a detailed accuracy.

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In order to procure a summary of the distribution of conversion factors through the various series of experiments, the values are classified in 0.3 units (Tables IV and V, Fig. 5). As can be seen from these frequency polygons, the distribution is rather more regular in Newfoundland than in Greenland. The mean figure for conversion factors and the means for each series were as follows:

<u>Newfoundland</u>	- 1953 (Q): 19 samples. Mode = 2.875 (42.1%); Mean=2.9
	- 1954 (Q): 24 samples. Mode = 3.0 (45.9%); Mean = 2.9
	- 1955 (Q): 22 samples. Mode = 3.0 (40.9%); Mean = 2.8
	- 1955 (D): 7 samples. Mode = 2.7 (57.2%); Mean = 2.8
<u>Greenland</u>	- 1953 (Q): 17 samples. Mode = 2.875 (47.0%); Mean=2.6
	- 1954 (Q): 35 samples. Mode = 3.0 (37.1%); Mean = 2.9
	- 1955 (Q): 30 samples. Mode = 2.7 (40.0%); Mean = 2.7
	- 1955 (D): 15 samples. Mode = 3.0 (33.3%); Mean = 3.3
<u>Labrador</u>	- 1953 (Q): 11 samples. Mode = 2.875 (45.5%); Mean=3.0

Contrary to what one should expect from the big variation observed in the conversion factors in the various samples, the mean values obtained for the series are in relatively good agreement, in particular in Subarea 3 (conversion factor = 2.8-2.9). In Subarea 1 the variation is greater (2.6-2.9), even after discarding the high figure 3.3 of Series D (1955), which was made up of homogeneous samples all characterized by the exceptionally big length of fish used (88.0 cm.).

On the other hand, the initial weighings (fresh round) of the samples of Series D were made with greater accuracy than those of Series Q, in which often the initial weight is smaller than it should be. This becomes evident from the many cases in which "indeterminable loss" represents a negative figure. The conversion factors in Series Q are no doubt affected by this initial weighing error, and will therefore be smaller than they should be.

Considering the relative uniformity of the mean values obtained for the various subareas of the Northwest Atlantic, we feel that a single conversion factor can be applied without discriminating between Subareas 1, 2 and 3. This factor should be slightly higher than the values obtained in Series Q. We therefore propose to adopt - also from its easy application in statistical calculations - for the conversion of weights of green salted cod landed from the Portuguese fleet to round fresh fish as coming from the sea in the ICNAF area, the conversion factor 3.0.

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TABLE I - GREENLAND

	1953 (Q) (Figsairvede)				1954 (Q) (Raiivo)				1955 (Q) (Raiivo)				1955 (D) (Raiivo)			
	No. Samples	Max.	Min.	Aver.	No. Samples	Max.	Min.	Aver.	No. Samples	Max.	Min.	Aver.	No. Samples	Max.	Min.	Aver.
No. of days in the hold	17	96	23	57.8	35	146	13	61	29	177	12	66	15	230	128	154
Amount of salt used, kgs.	17	40.0	18.0	21.9	33	35.0	13.0	19.2	29	39.5	12.0	22.4	15	45.4	22.5	31.0
No. of fish in sample	17	50	10	25.3	35	52	12	26.5	30	49	8	28	15	53	7	28
Most frequent or mean size (cm.)	17	111.0	56.0	77.7	34	100.0	57.0	76.0	29	112.0	48.0	75.0	15	122.0	49.0	77.8
Weight of fish, round fresh	17	-	-	100.0	35	-	-	100.0	29	-	-	100.0	15	112.0	72.7	99.8
" " heads	17	22.0	6.0	7.7	32	24.3	14.5	18.7	27	29.0	13.7	18.7	15	21.7	17.9	19.5
" " livers	17	6.3	0.5	4.1	34	7.5	2.7	4.5	30	9.3	2.0	4.9	15	6.0	2.9	4.4
" " gonads	17	-	-	-	18	1.5	0.2	0.7	19	4.0	0.3	1.2	15	1.9	0.8	1.7
" " intestines	17	20.4	6.5	12.1	31	14.0	5.3	8.4	28	11.8	5.0	8.2	15	12.3	2.0	7.9
" " air bladder	17	2.0	0.8	1.1	33	2.7	0.6	1.3	21	2.5	0.5	1.2	15	2.0	0.8	1.3
" " spinal column	17	6.5	3.6	5.2	35	7.7	3.4	5.5	30	8.5	3.5	5.3	15	9.2	3.2	7.7
" " when placed in hold	17	66.0	58.0	60.4	35	66.4	52.8	60.2	30	48.0	29.9	36.8	15	66.4	45.7	57.7
" " when landed	17	49.0	32.0	38.6	35	47.0	25.0	36.9	30	48.0	29.9	36.8	15	36.9	27.3	35.4
Total recoverable	17	90.0	73.0	82.4	32	76.9	63.4	71.3	28	78.7	62.5	72.0	15	79.0	60.0	69.2
Indeterminable loss	-	-	-	-	26	6.7	4.6	1.1	25	5.5	5.9	0.6	15	8.3	-0.2	5.5
Total loss before salting	17	42.0	36.1	39.6	35	47.2	33.6	39.8	30	47.5	32.0	39.1	15	56.5	34.1	43.3
Difference, salting - landing	17	34.1	12.7	22.2	35	39.4	12.0	24.8	30	34.6	15.0	24.1	15	32.3	16.2	25.3
" " round fresh - landing	17	68.0	51.0	61.4	35	75.0	53.0	64.3	30	70.1	52.0	63.2	15	77.7	66.7	70.4
Loss per day in hold	17	0.995	0.210	0.384	35	1.892	0.166	0.614	29	1.833	0.172	0.482	15	0.232	0.126	0.175
Factor of loss up to salting	17	1.9	1.5	1.7	35	1.9	1.5	1.7	30	1.9	1.5	1.7	15	2.2	1.5	1.8
Conversion factor	17	3.1	2.1	2.6	35	4.0	2.1	2.9	20	3.3	2.1	2.7	15	3.8	2.7	3.3

TABLE II - KIMPOUNGLAND

	1953 (Q) (Pices/raeto)						1954 (Q) (Raiivo)						1955 (Q) (Raiivo)						1955 (D) (Raiivo)					
	No. Samples	Max.	Min.	Aver.	No. Seen-placed	No. Samples	Max.	Min.	Aver.	No. Seen-placed	No. Samples	Max.	Min.	Aver.	No. Seen-placed	No. Samples	Max.	Min.	Aver.	No. Seen-placed	No. Samples	Max.	Min.	Aver.
No. of days in the hold	19	53	12	27.8	24	174	16	69	21	155	11	81.5	7	153	133	140								
Amount of salt used, kgs.	19	26.0	11.5	18.5	23	40.0	10.0	21.3	22	29.0	12.0	19.4	7	39.0	27.0	33.0								
No. of fish in sample	19	47	8	24.9	24	59	13	27.3	21	44	6	28.7	7	29	7	13								
Most frequent or mean size (cm.)	19	118.0	61.0	80.3	24	110.0	53.0	79.2	22	130.0	50.0	77.3	7	116.1	74.4	101.0								
Weight of fish, round fresh	19	-	-	100.0	24	-	-	100.0	22	-	-	100.0	7	104.2	99.2	101.4								
" " heads	19	22.0	7.0	8.3	22	29.0	15.0	19.8	19	23.0	15.0	19.0	7	22.0	18.0	20.4								
" " livers	19	6.3	2.5	4.9	23	7.3	2.4	5.2	22	7.5	3.0	4.9	7	6.6	3.8	4.4								
" " gonads	-	-	-	-	10	4.5	0.1	3.0	8	2.8	0.2	1.6	7	2.7	1.1	1.8								
" " intestines	19	25.0	6.8	13.1	23	12.0	5.0	8.9	22	13.5	5.0	8.9	7	7.6	5.0	6.0								
" " air bladder	19	1.3	0.4	0.9	21	2.5	0.1	1.0	18	1.2	0.5	0.9	7	1.9	0.8	-								
" " spinal column	19	7.0	4.0	5.0	24	7.0	2.9	5.3	21	6.0	3.5	5.2	7	6.1	5.0	5.0								
" " when placed in hold	19	69.0	52.5	58.1	24	69.0	48.0	59.2	22	72.0	52.0	59.4	7	60.9	55.8	59.0								
" " when landed	19	40.0	28.0	34.6	24	48.0	30.0	34.6	22	43.0	28.3	35.4	7	38.8	33.1	35.8								
Total recoverable	19	89.0	71.0	77.9	21	86.5	60.4	70.2	18	78.0	63.5	69.6	7	74.2	66.7	70.1								
Indeterminable loss	-	-	-	-	19	6.5	-6.0	0.5	16	7.0	-2.4	2.1	7	5.3	1.1	3.1								
Total loss before salting	19	47.0	32.0	41.9	24	52.0	31.0	40.8	22	47.0	28.0	40.6	7	44.4	41.1	42.9								
Difference, salting - landing	19	29.0	17.0	23.6	24	29.5	17.0	24.5	22	29.3	11.0	23.6	7	25.0	19.3	23.1								
" " round fresh - landing	19	72.0	60.0	65.4	24	70.0	52.0	65.4	22	69.5	57.0	64.2	7	69.1	51.3	65.5								
Loss per day in hold	19	1.916	0.479	0.846	24	1.625	0.125	0.566	21	1.909	0.115	0.452	7	0.184	0.145	0.165								
Factor of loss up to salting	19	1.9	1.4	1.7	24	2.1	1.4	1.7	22	1.9	1.4	1.7	7	1.8	1.7	1.7								
Conversion factor	19	3.6	2.5	2.9	24	3.3	2.1	2.9	22	3.5	2.0	2.8	7	3.0	2.6	2.8								

TABLE III - LABRADOR

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	1953 (Q) (Figueiredo)			
	No. Samples	Max.	Min.	Aver.
No. of days in the hold	11	86.0	19.0	54.9
Amount of salt used, kgs.	11	20.0	8.0	13.0
No. of fish in sample	11	56	22	35.9
Most frequent or mean size (cm.)	11	78.0	50.0	66
Weight of fish, round fresh	11	-	-	100.0
" " heads	8	17.5	15.0	15.8
" " livers	11	9.7	6.0	8.1
" " gonads	-	-	-	-
" " intestines	11	26.0	9.1	13.4
" " air bladder	10	1.6	0.5	0.8
" " spinal column	11	7.7	3.4	4.7
" when placed in hold	11	62.0	46.0	55.8
" when landed	11	37.0	30.0	33.3
Total recoverable	11	72.9	65.0	69.3
Indeterminable loss	-	-	-	-
Total loss before salting	11	54.0	38.0	44.1
Difference, salting - landing	11	31.6	14.0	22.5
" round fresh - landing	11	70.0	63.0	66.6
Loss per day in hold	11	0.947	0.177	0.495
Factor of loss up to salting	11	2.17	1.70	1.80
Conversion factor	11	3.33	2.70	3.01

TABLE IV - GREENLAND

Conv. Fact.	1954 (Q)		1955 (Q)		1955 (D)	
	No.	%	No.	%	No.	%
2.1	2	5.7	2	6.7	-	-
2.4	9	25.7	5	16.7	-	-
2.7	5	14.3	12	40.0	1	6.7
3.0	13	37.1	9	30.0	5	33.3
3.3	4	11.4	2	6.7	4	26.7
3.6	1	2.9	-	-	4	26.7
3.9	1	2.9	-	-	1	6.7
T	35	100.0	30	100.1	15	100.1

TABLE V - NEWFOUNDLAND

Conv. Fact.	1954 (Q)		1955 (Q)		1955 (D)	
	No.	%	No.	%	No.	%
2.1	1	4.2	-	-	-	-
2.4	1	4.2	6	27.3	-	-
2.7	5	20.8	4	18.2	4	57.2
3.0	11	45.9	9	40.9	3	42.7
3.3	6	25.0	2	9.1	-	-
3.6	-	-	1	4.5	-	-
3.9	-	-	-	-	-	-
T	24	100.1	22	100.0	7	99.9

TABLE VI - GREENLAND (1954 - Q)

Exp. No.	Date Put in Hold	Days in Hold	Salt Used in Hold	Position in Pile	No. Fish in Pile	ACTUAL WEIGHTS										Total Recoverable	Undetermined Loss	Total Losses Landed	Loss Per Day in Hold	Conv. Fact. to Round Fresh Ready for Salting	Landed	
						Head	Layer	Coated	Intest.	Blad.	Air	Ant.	Third	Spine	Body Ready for Salting							Body Landed
1	Trawl	7-6	27	16.0	M	22	86	18.3	4.0	-	8.6	1.0	5.2	59.0	33.0	69.2	-	67.0	0.962	1.7	3.0	
2	"	16-6	35	16.7	M	33	77	21.8	2.7	0.8	6.3	1.3	6.3	61.0	34.2	71.3	-0.2	65.8	0.774	1.6	2.9	
3	"	20-6	14	13.0	T	21	85	18.2	3.3	-	9.0	1.0	5.5	59.0	32.5	68.8	4.0	67.5	1.892	1.7	3.1	
4	"	21-6	24	14.0	T	41	69	21.0	4.5	1.5	5.5	2.0	5.0	60.0	43.0	71.5	0.5	57.0	0.708	1.7	2.3	
5	"	25-6	22	20.0	M	52	57	19.5	3.3	-	5.3	-	7.0	65.0	42.0	-	-	58.0	1.045	1.5	2.4	
6	"	29-6	26	14.8	M	37	72	20.0	3.0	-	7.5	1.0	5.5	60.0	42.0	69.5	3.0	58.0	0.692	1.7	2.4	
7	"	1-7	27	13.0	M	13	95	19.0	5.0	-	10.0	1.0	6.0	58.5	33.2	70.5	0.5	66.8	0.936	1.7	3.0	
8	Vine	3-7	119	22.0	B	20	85	17.5	3.0	1.0	7.5	1.5	6.0	65.0	43.0	75.5	-1.5	57.0	0.184	1.5	2.3	
9	Brawl	8-7	13	18.8	T	24	80	20.0	4.8	-	14.0	1.0	5.8	53.2	34.0	64.8	1.2	66.0	1.476	1.9	2.9	
10	Vine	8-7	92	-	T	37	67	18.6	3.6	-	7.5	0.8	6.0	62.0	41.2	72.4	1.5	58.8	0.226	1.6	2.4	
11	Trawl	13-7	17	14.0	M	39	-	20.5	4.0	-	9.5	-	6.5	59.5	37.0	-	-	63.0	1.322	1.7	2.7	
12	Vine	27-7	75	22.0	M	14	97	14.5	4.5	1.4	7.1	1.2	4.6	60.0	32.5	70.3	6.7	67.5	0.366	1.7	3.1	
13	"	2-8	82	20.0	M	30	76	18.0	4.0	0.4	8.0	1.0	5.5	59.5	41.0	70.0	3.6	59.0	0.225	1.7	2.4	
14	"	4-8	43	19.0	T	37	60	21.3	3.5	0.4	6.8	2.7	5.6	61.5	30.0	73.3	-1.8	70.0	0.732	1.6	3.3	
15	"	6-8	45	20.0	T	15	85	19.0	3.3	1.3	6.5	1.2	6.4	66.0	32.0	76.9	-3.7	68.0	0.754	1.5	3.1	
16	"	11-8	59	18.0	M	15	86	17.7	4.8	0.4	11.8	0.9	6.3	57.0	40.0	69.0	1.1	60.0	0.491	1.8	2.5	
17	"	11-8	80	26.0	T	37	72	18.0	4.0	0.5	7.0	0.7	4.3	62.0	35.5	71.0	3.5	64.5	0.331	1.6	2.8	
18	"	13-8	122	17.0	M	13	100	-	5.0	-	-	1.0	5.0	57.0	30.0	68.0	-	70.0	0.221	1.8	3.3	
19	"	13-8	146	18.0	M	12	94	18.5	6.0	0.5	10.5	1.0	5.0	53.5	29.2	55.5	5.0	70.8	0.166	1.9	3.4	
20	"	14-8	104	-	M	26	74	19.2	4.6	0.6	7.9	0.6	5.3	66.4	27.0	76.9	-4.6	73.0	0.378	1.5	3.7	
21	"	14-8	140	24.0	M	18	80	-	4.1	0.7	-	1.0	3.4	59.0	47.0	67.5	-	53.0	0.085	1.7	2.1	
22	"	15-8	47	18.0	T	15	89	19.0	4.5	1.0	9.5	1.0	5.5	59.0	33.0	70.0	0.5	67.0	0.553	1.7	3.0	
23	"	16-8	30	20.0	M	33	65	18.7	4.7	0.5	8.4	1.3	5.9	61.4	30.0	73.3	-0.9	70.0	1.046	1.6	2.7	
24	"	17-8	44	23.0	T	25	77	15.0	5.0	0.2	9.0	1.0	5.0	64.0	37.6	75.0	0.8	62.4	0.600	1.6	2.5	
25	"	22-8	30	21.0	T	28	74	18.0	4.8	-	9.0	1.0	4.5	62.0	40.0	72.3	-	60.0	0.733	1.6	2.5	
26	"	22-8	67	18.0	M	38	68	17.0	5.7	-	8.0	1.4	5.0	63.0	45.0	75.1	-	55.0	0.267	1.6	2.2	
27	"	22-8	95	35.0	T	15	80	23.0	5.5	-	-	1.5	6.0	59.0	36.0	72.0	3.0	64.0	0.241	1.7	2.8	
28	Trawl	23-8	118	17.5	B	43	60	-	5.4	-	-	0.9	7.7	60.0	32.0	74.0	-	68.0	0.237	1.7	3.1	
29	Line	24-8	35	16.0	T	19	74	19.0	5.2	0.9	8.0	1.1	4.5	60.0	32.0	70.8	1.3	68.0	0.800	1.7	3.1	
30	"	25-8	37	18.0	M	21	75	24.3	3.8	0.4	9.0	0.9	5.9	52.8	25.0	63.4	2.9	75.0	0.751	1.9	4.0	
31	"	31-8	121	19.0	T	30	76	18.1	4.1	-	8.1	1.0	5.6	59.6	34.8	70.3	3.0	65.2	0.204	1.7	2.9	
32	"	7-9	28	29.0	T	17	100	19.7	5.6	0.9	8.6	0.9	6.1	59.1	41.0	71.7	-0.9	59.0	0.645	1.7	2.4	
33	Trawl	25-9	95	13.5	M	25	80	14.5	-	-	11.5	1.0	5.3	57.0	32.5	-	-	67.5	0.257	1.8	3.1	
34	"	26-9	45	19.0	M	32	65	16.0	7.5	-	8.0	0.6	4.8	63.0	35.0	75.9	0.1	65.0	0.622	1.6	2.9	
35	"	26-9	45	20.0	M	31	67	16.5	6.5	-	7.6	0.6	5.3	63.5	37.0	75.9	1.0	63.0	0.388	1.6	2.7	
Total No. Exps.			35	33	-	35	34	32	34	18	31	33	35	35	35	32	26	35	35	35	35	35
Total Mean			61	19.2	-	26.5	76.0	18.7	4.5	0.7	8.4	1.3	5.5	60.2	36.9	71.3	1.1	64.3	0.614	1.7	2.9	

/ B = Bottom, M = Middle, T = Top

TABLE VII - GREENLAND (1955 - Q)

Exp. No.	Trawl or Line	Date Put in Hold	Days in Hold	Salt Used Kgs.	Fish taken in Pile	Post. No. in Exp.	Mode (cm)	--- ACTUAL WEIGHTS ---										Total Recoverable	Undetermined Loss	Total Loss Landed Weight	Loss Per Day in Hold	Conv. Fact. to Round Fresh Ready for Salting	Landed
								Head	Liver	Goned	Intest.	Bled.	Air	Ant.	Body Ready for Salting	Body Landed							
1	Trawl	17-5	45	19.0	M	33	72	20.0	3.5	-	8.0	-	8.5	60.0	35.0	-	71.0	0.555	1.6	2.8			
2	"	20-5	37	19.0	M	35	-	22.0	2.0	1.5	5.5	1.0	6.0	62.0	40.0	0	73.6	0.594	1.6	2.5			
3	"	25-5	60	14.5	M	46	48	-	5.5	-	11.5	0.9	4.2	63.0	48.0	4.0	68.2	0.250	1.6	2.1			
4	"	26-5	47	19.0	M	20	75	20.0	4.0	-	11.8	0.9	4.2	59.1	36.5	0	68.2	0.480	1.7	2.7			
5	"	3-6	29	20.0	M	41	68	19.0	5.0	0.5	5.5	-	6.5	63.5	39.5	5.5	-	0.827	1.6	2.5			
6	"	12-6	-	19.0	M	37	58	29.5	4.0	-	6.0	0.7	5.3	52.5	34.0	2.0	62.5	-	1.9	2.9			
7	Line	17-6	77	24.0	T	15	98	19.5	4.4	1.9	11.0	1.0	4.0	58.0	37.3	0.2	67.4	0.269	1.7	2.7			
8	"	21-6	129	39.5	B	39	67	18.6	2.2	1.4	6.9	0.5	7.0	62.0	31.5	1.4	71.7	0.236	1.6	3.2			
9	Trawl	30-6	12	18.0	T	39	72	20.5	3.2	-	7.3	1.2	7.1	62.0	40.0	-1.3	73.5	1.833	1.6	2.5			
10	Line	6-7	121	16.0	M	18	94	20.3	3.6	1.1	7.2	1.1	7.5	57.8	37.0	1.4	70.0	0.172	1.7	2.7			
11	"	10-7	86	50.0	B	28	69	18.0	2.8	-	9.0	1.0	4.7	58.5	39.0	-	67.0	0.226	1.7	2.6			
12	"	11-7	87	24.0	M	25	71	-	3.0	1.0	-	1.4	4.5	62.1	37.0	-	71.0	0.288	1.6	2.7			
13	"	3-8	130	20.5	M	27	72	18.0	4.0	-	8.0	1.0	5.0	60.0	32.0	4.0	70.0	0.215	1.7	3.1			
14	"	4-8	59	21.0	-	8	112	17.5	4.1	1.7	7.8	1.1	5.8	59.0	34.0	3.0	70.0	0.422	1.6	3.1			
15	"	3-8	84	19.0	M	34	73	18.6	5.0	0.3	9.1	1.0	5.0	60.0	34.0	1.0	71.0	0.308	1.7	3.0			
16	"	15-8	75	24.0	M	30	73	18.0	5.5	0.5	8.0	1.0	5.0	59.0	36.5	3.0	70.5	0.299	1.7	2.7			
17	"	21-8	40	14.0	M	27	85	17.0	5.0	1.0	6.0	1.0	4.0	68.0	38.7	-2.0	78.0	0.733	1.5	2.6			
18	"	26-8	54	32.0	T	49	65	16.2	9.3	0.5	8.1	1.3	4.1	64.0	37.0	-3.5	78.7	0.508	1.6	2.7			
19	"	27-8	59	18.0	M	38	68	17.0	5.7	0.3	7.5	1.4	5.0	61.0	45.0	2.1	73.1	0.272	1.6	2.2			
20	"	30-8	77	-	M	25	76	19.2	5.0	0.8	7.4	1.0	5.6	61.0	34.0	0	72.6	0.350	1.6	2.9			
21	Trawl	30-8	151	13.5	M	29	76	17.5	6.1	-	11.0	1.0	5.0	58.0	32.0	1.4	70.1	0.172	1.8	3.1			
22	Line	30-8	33	22.0	T	27	75	13.7	5.1	0.7	8.7	0.9	5.8	64.9	40.0	0.2	76.7	0.754	1.5	2.5			
23	"	31-8	93	25.0	T	18	90	18.5	5.5	-	10.5	1.5	5.5	57.0	38.0	1.5	69.5	0.203	1.7	2.6			
24	"	3-9	39	32.0	T	28	63	16.6	5.1	4.0	8.8	1.2	5.7	64.5	29.9	-5.9	76.5	0.887	1.6	3.3			
25	"	6-9	64	21.0	T	13	90	17.0	6.0	-	7.0	1.5	3.5	65.5	39.0	-0.5	76.5	0.413	1.5	2.6			
26	"	6-9	45	20.0	T	26	73	18.0	5.4	0.8	8.4	1.6	4.5	61.3	33.0	0	72.8	0.627	1.6	3.0			
27	"	8-9	49	12.0	T	20	83	20.0	6.0	3.0	5.0	1.0	6.0	58.0	33.0	1.0	71.0	0.509	1.7	3.0			
28	"	14-9	99	27.0	M	21	76	18.0	9.1	0.8	9.5	1.5	5.0	59.5	34.0	-3.4	66.0	0.237	1.7	2.9			
29	"	15-9	21	23.0	T	27	70	-	3.3	0.9	-	1.2	4.5	59.5	36.0	-	68.5	1.119	1.7	2.8			
30	"	16-9	19	25.0	-	24	75	16.5	5.0	-	10.0	2.5	5.0	66.0	42.5	-	78.5	1.234	1.5	2.3			
Total No. Exps.						29	29	27	30	19	28	28	30	60.0	30	25	30	29	30	30	30		
Total Meters						66	22.4	18.7	4.9	1.2	8.2	1.2	5.3	60.9	26.8	0.6	72.0	0.482	1.7	2.7			

B = Bottom, M = Middle, T = Top

TABLE VIII - CHESTERLAND (1955 - D)
(only line fishing)

Date Put in Exp.	No. Hold	Days in Hold	Salt Used	Post- ion No.	File	in Fish	Made Min.	Max.	--- ACTUAL WEIGHTS ---										Total Recover- able	Undeter- mined Loss	Total Less Landed Weight	Loss Per Day in Hold	Conv. Fact. to Round Ready For Salting	Landed Fresh
									Round	Fresh	Head	Liver	Consid	Intes-	Bled-	Third	Ant.	Body Ready for Salting						
13-4	53	230	45.4	B	62	69-49	98.4	19.5	2.9	0.9	5.4	1.3	4.3	64.3	31.5	72.8	-0.2	66.9	0.143	1.5	3.1			
23-6	159	159	22.5	T	16	86 101-85	95.2	20.7	3.1	1.6	7.9	1.4	5.9	54.2	28.5	64.6	0.5	66.7	0.162	1.8	3.3			
29-6	153	153	29.0	B	15	92 110-82	104.5	21.7	5.1	6.0	2.0	1.3	6.1	58.9	30.0	71.4	3.4	74.5	0.189	1.8	3.5			
30-6	152	152	31.0	M	11	99 109-90	103.0	19.9	6.0	1.6	7.2	1.3	5.0	58.5	29.6	70.8	3.5	74.4	0.190	1.8	3.5			
4-7	148	148	27.5	T	37	67 72-63	99.6	18.4	3.2	0.8	8.6	1.1	5.9	60.1	32.2	70.3	1.5	67.4	0.188	1.7	3.1			
8-7	144	144	23.0	B	19	86 92-80	103.2	20.3	4.2	1.2	6.6	1.3	5.9	60.2	34.8	71.6	3.5	68.4	0.176	1.7	3.0			
17-7	135	135	34.0	B	35	72 76-67	112.5	20.5	4.3	1.1	9.0	1.6	6.7	66.4	35.1	79.0	2.9	77.4	0.232	1.7	3.2			
17-7	135	135	38.5	B	14	93 102-90	100.6	19.8	4.8	1.5	7.4	1.1	5.7	56.4	27.7	68.0	3.9	72.9	0.212	1.8	3.6			
17-7	135	135	40.5	B	9	107 112-97	105.0	21.6	5.4	2.0	6.4	1.4	6.0	56.9	27.3	69.7	5.3	77.7	0.219	1.8	3.8			
24-7	128	128	31.0	T	37	68 73-63	101.4	18.3	4.0	1.1	8.1	1.8	6.6	59.3	34.7	71.7	2.2	66.7	0.192	1.7	2.9			
24-7	128	128	26.0	T	14	92 96-88	72.7	19.4	3.7	1.9	12.0	2.0	9.2	45.7	29.5	60.6	8.3	72.7	0.126	2.2	3.5			
24-7	128	128	25.0	B	8	107 118-96	103.9	17.9	4.0	1.5	12.3	1.6	5.2	56.0	33.1	66.8	5.4	70.8	0.179	1.9	3.2			
4-8	176	176	34.0	M	33	70 77-65	100.2	17.9	4.5	0.9	7.1	1.0	4.5	61.2	36.9	71.2	3.1	63.3	0.138	1.5	2.1			
4-8	176	176	30.0	M	12	94 100-90	98.5	18.1	5.2	1.5	9.2	0.8	3.2	53.8	30.7	63.0	6.7	67.3	0.131	1.8	3.2			
4-8	176	176	28.0	M	7	115 122-104	98.5	18.8	5.0	1.4	9.9	1.0	4.9	54.8	29.9	65.7	2.7	68.6	0.141	1.8	3.3			
Total No. Exp.	15	15	15		15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15			
Total Mean	154	154	31.0		21.3	88 122-49	99.8	19.5	4.4	1.7	7.9	1.3	5.7	57.8	31.4	69.2	3.5	70.4	0.175	1.8	3.3			

¹⁾ B = Bottom, M = Middle, T = Top

TABLE IX. - RE-FOUNDLED (1954 - Q)

Exp. No.	Trawl or Line	Date Put in Hold	Days in Hold	Salt Used Kgs.	Position in Fish Pile	No. Fish Exp.	Mode (cm)	ACTUAL WEIGHTS										Total Recoverable	Undetermined Loss	Total Less Weight Landed	Loss Per Day in Hold	Conv. Fact. to Found Fresh Ready for Salting	Landed
								Head	Liver	Coard	Intes-Bled	Third der Spine	Ant.	Body Ready for Salting	Body Landed								
1	Trawl	6-3	140	15.0	T	21	85	19.0	6.0	-	8.4	0.1	6.0	60.0	42.0	72.1	0.5	58.0	0.129	1.7	2.4		
2	"	12-4	105	18.8	B	21	80	16.6	5.4	11.1	11.9	1.2	5.8	48.0	31.0	60.4	0.0	69.0	0.162	2.1	3.2		
3	"	7-5	84	10.0	B	24	77	18.0	5.0	4.0	9.0	1.0	5.0	59.0	31.3	70.0	-1.0	68.7	0.329	1.7	3.2		
4	Line	19-5	120	26.0	M	26	72	24.2	-	0.1	7.6	2.5	5.3	59.5	30.0	68.1	-	70.0	0.245	1.7	3.3		
5	"	16-6	76	25.0	M	15	105	18.4	2.4	1.9	11.3	1.2	5.2	59.5	48.0	68.3	0.1	52.0	0.151	1.7	2.1		
6	"	20-6	174	17.0	M	17	90	-	3.0	-	-	0.8	5.0	62.7	34.0	71.5	-	66.0	0.165	1.6	2.9		
7	"	8-7	48	25.2	M	15	90	19.5	5.0	-	8.0	0.5	6.0	60.0	32.5	71.5	1.0	67.5	0.572	1.7	3.1		
8	"	21-7	42	23.0	M	23	70	21.0	4.0	-	8.0	2.0	5.0	61.0	34.0	72.0	1.0	66.0	0.642	1.6	2.9		
9	"	9-8	54	40.0	M	34	70	18.0	7.0	-	7.0	1.0	2.0	66.0	30.0	76.0	1.0	70.0	0.666	1.5	3.3		
10	"	16-8	40	22.5	M	10	104	22.0	4.0	-	7.0	1.0	7.0	60.0	36.0	72.0	-1.0	64.0	0.600	1.7	2.8		
11	"	30-8	82	40.0	M	26	83	20.0	6.0	0.5	6.5	1.0	5.0	61.0	34.0	73.0	0.0	66.0	0.329	1.6	2.9		
12	"	30-8	121	15.0	T	22	75	16.5	7.3	-	8.0	1.5	2.9	55.5	31.0	67.2	6.5	69.0	0.202	1.8	3.2		
13	Trawl	20-9	103	14.5	M	17	85	22.0	3.0	-	8.0	0.5	6.5	60.0	35.5	70.0	0.0	64.5	0.238	1.7	2.5		
14	"	24-9	90	18.0	M	35	69	29.0	4.0	-	5.9	0.8	5.3	53.0	34.0	63.1	2.0	66.0	0.211	1.9	2.9		
15	"	17-10	74	19.0	M	21	82	21.0	4.1	-	10.7	1.0	4.2	58.0	35.0	67.3	1.0	65.0	0.310	1.7	2.9		
16	"	20-10	82	22.0	M	21	85	20.0	4.0	-	9.0	0.8	5.0	61.0	35.0	70.8	0.2	65.0	0.317	1.6	2.9		
17	"	12-11	41	19.0	M	59	53	27.0	5.0	-	8.0	0.7	5.1	52.0	35.0	62.8	2.2	65.0	0.414	1.9	2.9		
18	"	23-11	37	25.0	M	52	55	18.0	5.0	-	10.5	-	7.0	59.5	39.0	-	-	61.0	0.554	1.7	2.6		
19	"	23-11	35	-	T	37	68	15.0	6.5	3.0	10.5	1.0	7.0	57.0	38.5	71.5	0.0	61.5	0.528	1.8	2.6		
20	"	27-11	27	23.0	M	44	60	17.0	7.0	1.0	13.0	-	6.0	62.0	32.5	-	-6.0	67.5	1.092	1.6	3.1		
21	"	29-11	30	17.0	M	41	60	17.0	6.5	-	11.0	-	6.5	59.0	36.0	-	-	64.0	0.766	1.7	2.8		
22	"	29-11	18	15.5	T	46	63	-	8.0	2.5	7.0	1.0	6.5	69.0	33.0	86.5	-	67.0	2.000	1.4	3.0		
23	"	2-12	20	19.0	B	20	80	20.0	6.3	4.5	7.0	0.7	3.6	57.0	30.0	67.6	0.9	70.0	1.350	1.8	3.3		
24	"	5-12	16	21.0	T	13	110	16.0	6.0	-	12.0	0.8	5.0	60.0	34.0	71.8	0.2	66.0	1.625	1.7	2.9		
Total No. Exps.			24	23		24	24	22	23	10	23	21	24	24	24	21	19	24	24	24	24	24	
Total Mean			69	21.3	-	27.3	79.2	19.8	5.2	3.0	8.9	1.0	5.3	59.2	34.6	70.2	0.5	65.4	0.566	1.7	2.9		

B = Bottom, M = Middle, T = Top

TABLE X - MINIFOUNDLAND (1955 - Q)

Exp. No.	Trawl Line	Date Put in Hold	Days in Hold	Salt Used Kgs.	Position in Fish Pile	No. Fish in Exp.	-- ACTUAL WEIGHTS --										Total Recoverable	Undetermined Loss	Total Landed Weight	Loss Per Day in Hold	Conv. Fact. to Round Fresh Ready for Salting	
							Head	Liver	Gizzard	Intes-Blad-Third	Air der Spine	Ant. Third	Body Ready for Salting	Body Landed								
1	Trawl 1-4	1-4	88	18.0	M	7	115	20.0	4.5	2.0	13.5	0.5	4.5	55.0	30.5	64.5	0	69.5	0.278	1.8	3.3	
2	"	16-4	"	18.0	B	42	62	28.0	4.5	-	6.5	0.8	5.2	53.0	35.0	63.5	2.0	65.0	-	1.9	2.9	
3	"	28-4	49	19.5	M	24	82	16.5	5.5	-	12.5	1.6	5.8	52.0	41.0	64.9	6.1	59.0	0.244	1.9	2.4	
4	Line 21-5	21-5	155	29.0	M	19	95	19.5	3.4	2.8	10.0	0.5	5.2	55.4	28.3	64.5	3.2	71.7	0.175	1.8	3.5	
5	"	25-7	106	26.0	M	26	80	19.0	3.0	1.0	8.0	1.0	4.0	57.0	31.0	65.0	7.0	69.0	0.245	1.7	3.2	
6	Trawl 26-7	26-7	150	13.5	M	6	130	20.0	5.0	2.0	8.3	0.6	5.0	59.0	34.0	69.6	0.1	66.0	0.166	1.7	2.9	
7	Line 10-8	10-8	52	25.0	M	32	62	15.0	3.0	-	6.0	1.0	-	72.0	34.0	78.0	1.0	68.0	0.769	1.4	3.1	
8	"	12-8	65	19.0	M	13	103	17.4	3.5	-	6.3	0.5	5.6	64.3	35.0	73.9	2.4	65.0	0.450	1.7	2.8	
9	"	13-8	47	18.0	T	11	105	17.4	3.5	-	6.3	0.5	5.6	64.3	40.0	73.9	2.4	60.0	0.517	1.5	2.5	
10	Trawl 14-8	14-8	126	17.0	B	34	68	-	4.2	-	6.1	0.8	5.3	54.0	34.0	64.3	-	66.0	0.158	1.8	2.9	
11	"	22-8	131	12.8	M	44	52	-	6.2	-	10.8	0.8	4.2	58.0	43.0	69.2	-	57.0	0.115	1.7	2.3	
12	"	7-9	77	17.5	B	45	55	17.0	6.6	1.3	9.4	0.8	4.7	59.0	35.0	71.1	1.2	65.0	0.311	1.7	2.9	
13	"	15-9	92	12.0	M	28	50	-	7.5	-	12.8	1.0	3.5	60.0	40.0	72.0	-	60.0	0.217	1.7	2.5	
14	"	18-9	103	19.0	M	26	83	20.0	5.5	-	9.0	-	7.5	59.0	36.0	-	-	64.0	0.223	1.7	2.8	
15	"	3-10	114	28.0	M	33	71	21.5	6.0	-	7.0	-	6.0	59.5	40.0	-	-	60.0	0.174	1.7	2.5	
16	Line 5-10	5-10	31	22.0	-	36	67	19.5	6.0	0.2	6.5	1.2	6.0	63.0	37.0	76.2	-2.4	63.0	0.838	1.6	2.7	
17	Trawl 7-10	7-10	89	18.0	M	19	80	22.1	4.3	-	10.0	1.0	4.1	58.5	36.0	67.9	0	64.0	0.252	1.7	2.8	
18	"	10-10	110	17.0	M	44	70	23.0	3.0	1.0	5.0	1.0	5.0	60.0	35.0	69.0	2.0	65.0	0.227	1.7	2.9	
19	"	8-11	58	19.0	M	44	65	17.0	7.0	-	12.0	-	5.0	60.0	34.5	-	-	65.5	0.439	1.7	3.0	
20	"	3-12	11	13.5	T	-	70	15.0	4.0	-	8.3	1.2	4.8	64.0	43.0	74.0	0.7	57.0	1.909	1.6	2.3	
21	"	4-12	30	17.0	M	32	70	19.0	6.0	-	10.0	-	6.0	60.0	34.0	-	-	66.0	0.866	1.7	2.9	
22	"	4-12	28	28.0	T	38	65	15.0	6.0	2.5	10.5	1.0	5.5	59.5	34.0	72.0	0	66.0	0.910	1.7	2.9	
Total No. Exps.			21	22		21	22	19	22	8	22	18	21	22	22	18	-	22	21	22	22	22
Total Mean			81.5	19.4		28.7	77.3	19.0	4.9	1.6	8.9	0.9	5.2	59.4	35.4	69.6	-	64.2	0.452	1.7	2.8	

B = Bottom, M = Middle, T = Top

TABLE XI - NEWBORNLAND (1955 - D)
(only line fishing)

Date	Put in Hold	Days in Hold	Salt Used Kgs.	Position in Pile	No. Fish in Exp.	Mode	Min. (cm)	Max.	--- ACTUAL WEIGHTS ---							Total Recoverable	Undetermined Loss	Total Landed Weight	Loss Per Day In Hold	Conv. Fact. to Round Fresh			
									Round Fresh	Head	Liver	Gonads	Intes- tines	Blad- der	Air Ant. Third Spine						Body Ready For Salting	Body Landed	
1	24-8	153	34.0	B	29	74	79-69		103.4	18.5	6.6	1.1	7.0	0.9	5.8	60.9	36.8	74.2	2.6	66.6	0.157	1.7	2.8
2	24-8	142	34.0	B	13	97	102-91		100.2	21.0	4.1	1.4	5.8	0.9	5.9	55.8	33.1	66.7	5.3	67.1	0.160	1.8	3.0
3	24-8	142	39.0	B	8	111	118-107		101.2	22.0	3.8	2.7	5.0	0.8	5.6	60.2	35.2	70.4	1.1	66.0	0.176	1.7	2.9
4	28-8	138	34.0	M	8	115	122-108		104.2	21.9	4.0	1.8	7.6	0.9	6.0	60.5	35.1	71.4	1.5	69.1	0.184	1.7	3.0
5	28-8	138	31.0	M	14	96	100-90		101.2	20.2	4.0	1.7	5.8	1.1	5.6	59.4	36.2	70.1	3.4	65.0	0.168	1.7	2.8
6	2-9	133	27.0	T	7	116	125-112		99.2	18.0	3.9	2.2	5.6	1.0	6.1	57.1	35.5	68.1	5.3	63.7	0.162	1.7	2.8
7	2-9	133	32.0	T	12	98	103-95		100.1	21.0	4.6	1.9	5.0	1.9	5.0	58.1	38.8	69.6	2.6	61.3	0.145	1.7	2.6
Total No. Exp.			7		7				7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Total Mean	140	140	33.0		13	101			101.4	20.4	4.4	1.8	6.0	1.1	5.7	58.9	35.8	70.1	3.1	65.5	0.165	1.7	2.8

¹⁾ B = Bottom, M = Middle, T = Top

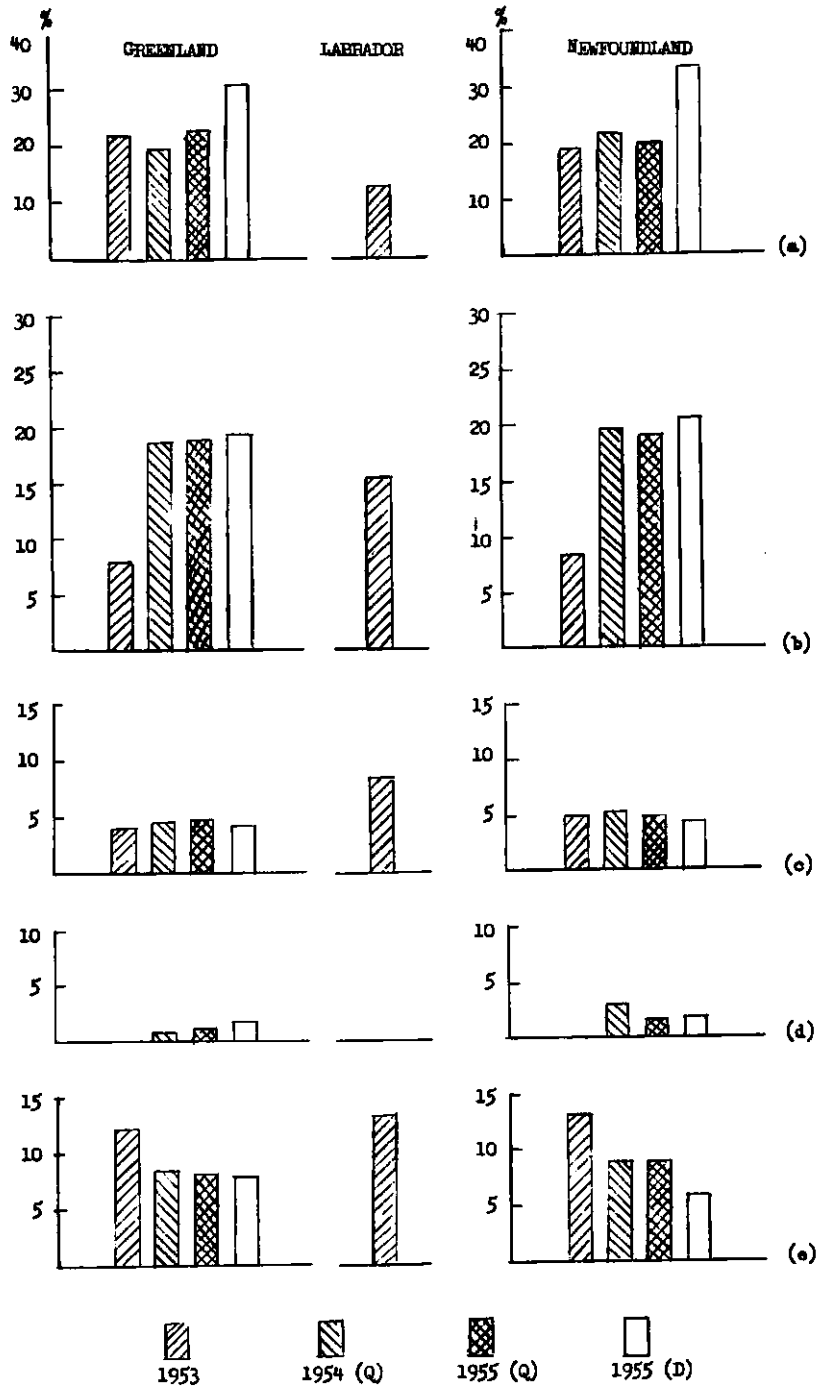
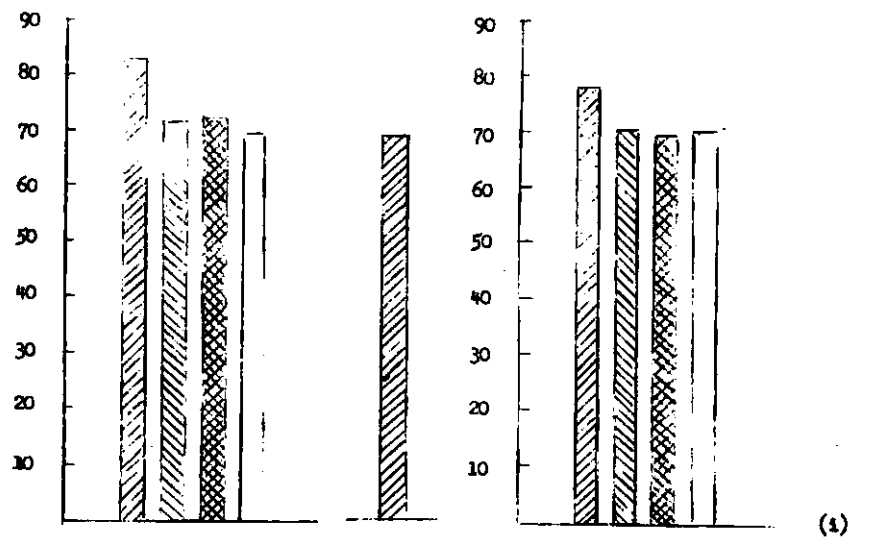
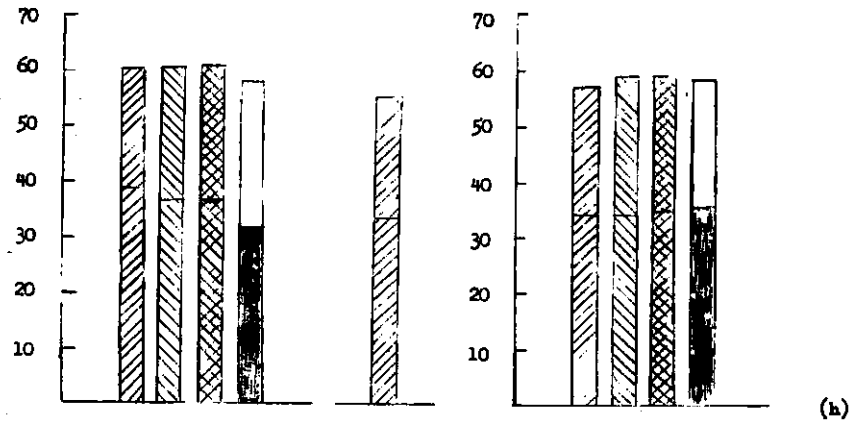
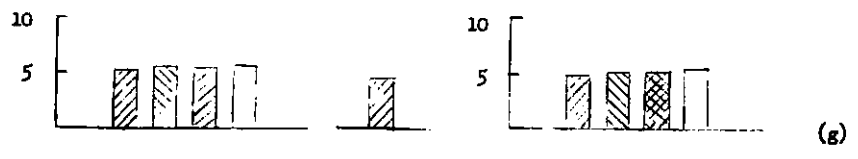
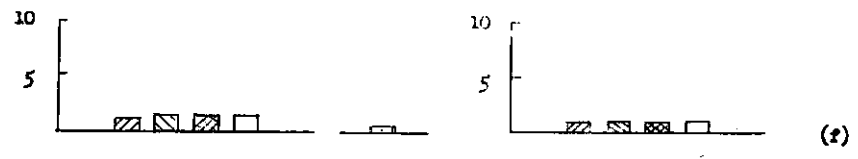


FIGURE 1. Greenland, Labrador and Newfoundland 1953-55. (a) Weight of salt used per 100 kgs. of round fresh fish and (b-g) weights of heads, livers, gonads, intestines, air bladders, and 3rd ant. part of vert. col. (h) weight when placed in hold and when landed per 100 kgs. (i) total recoverable per 100 kgs round fresh.



1953 1954 (Q) 1955 (Q) 1955 (D)

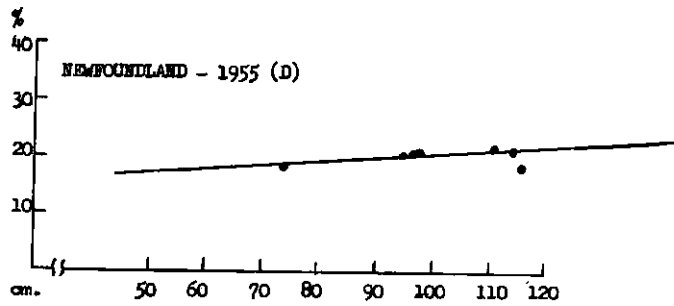
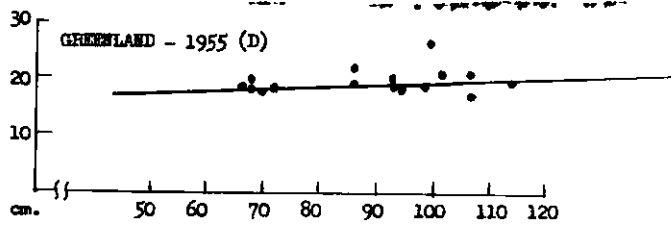


FIGURE 2. Weights of heads (%) in relation to average lengths of sample.

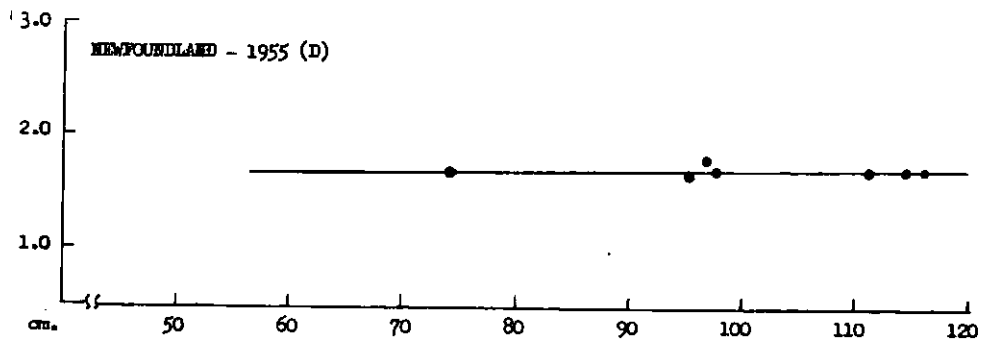
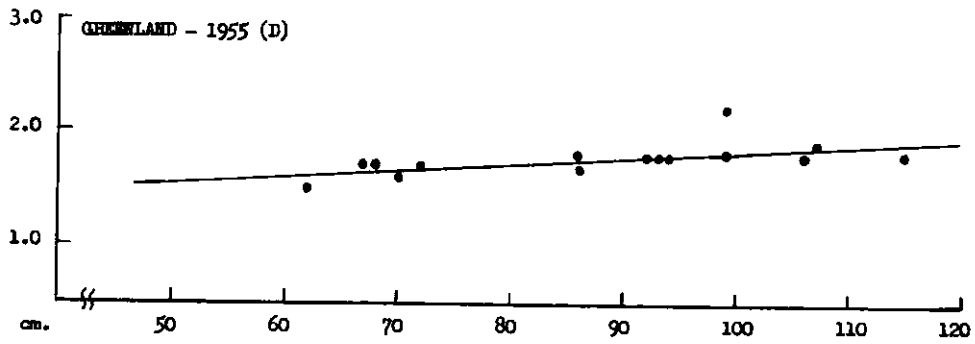


FIGURE 3. Conversion factor from ready for salting to round fresh compared with mean length of fish in samples.

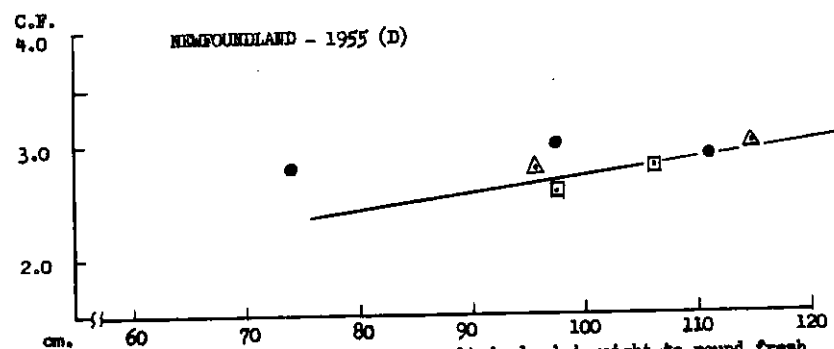
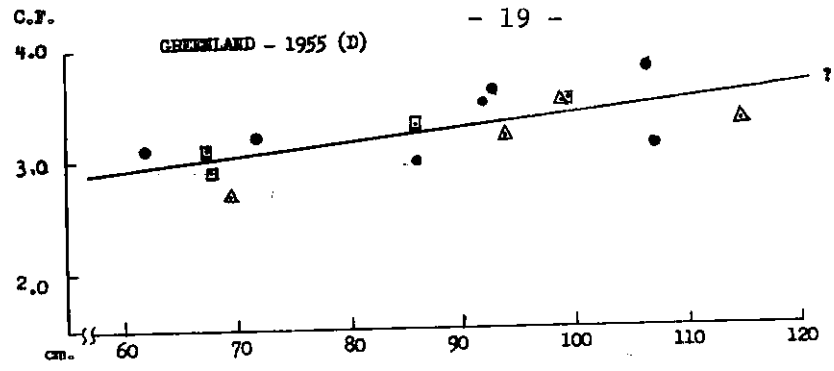


FIGURE 4. Conversion factor from green salted, landed weight to round fresh compared with length of fish in samples.

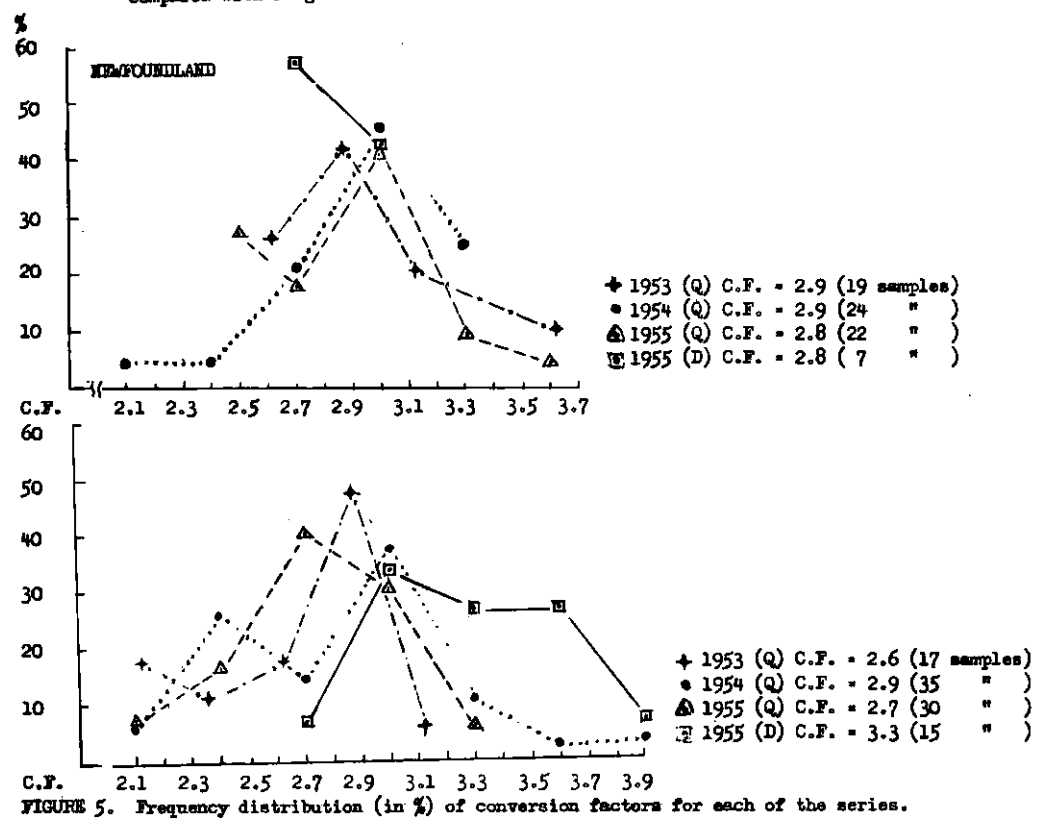


FIGURE 5. Frequency distribution (in %) of conversion factors for each of the series.

