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by Birger Rasmussen, Norway.

In 1955 further experiments were performed on the problem of conversion factors for Greenland cod. A total of 110 specimens were used as material for these investigations. The material was treated in exactly the same way as described in the Norwegian Research Report for 1954 (Serial No.278, 5th Ann. Meet. Doc. No.11). In 1955, however, a new item has been introduced, namely the weight of split fresh cod, with the backbone removed.

The results obtained in 1955 are shown in Table 1. In order to study the influence of the length of the fish on the conversion factor, the material has been divided into 5-cm. groups. The results arrived at in 1955 largely confirm the findings reported earlier. For converting the landed salt cod, which had been in the ship's hold for about 2 months, to fresh fish the mean conversion factor in 1955 was found to be 2.92. In 1953 and 1954 the same conversion factors were found to be respectively 3.13 and 3.14. The reason for the lower mean conversion factor in 1955 is obviously that the fish that year were somewhat smaller than in previous years. The mean size of the cod experimented with in 1955 was 74.10 cm. while in 1953 and 1954 it was respectively 75.48 and 74.66 cm.

The new factor added in 1955, that used for converting the split fresh cod with backbone removed to live round weight, shows increasing values with increasing size of the fish. Thus cod with a total length of 60 cm. has a conversion factor of 1.56 while a cod with a total length of 90 cm. has a conversion factor of 1.77 when converted from split fresh condition to fresh round weight. The mean value for this conversion factor is found to be 1.63.

In Table 2 the material from all the years (1953, 1954, 1955) has been added together. The total results only confirm what has been shown earlier, namely that the factor for converting landed salt cod to fresh round condition shows a variation with the size of the fish. A small fish of 55 cm. has a conversion factor of 2.46 when converted from landed salt fish to live weight. The factor increases gradually and when a fish measures 95 cm. the conversion factor is found to be 3.49. The mean conversion factor for converting salt fish to live weight is on an average 3.11. The same tendency of variation is also found in the factor used in converting the salt fish to fresh dressed weight. In the latter case the conversion factor increases from 1.52 in 55 cm. fish to 2.21 in 95 cm. fish. The mean factor for converting salt fish to dressed headless fish is 2.01.

In Fig.1 is given a graphic illustration of the variation of the two conversion factors. Of special interest, also, is the relationship between the salted length and live length of the cod. The conversion factor in this case seems to be identical in all size categories of cod. During each of the years 1953, 1954 and 1955, this conversion factor was found to be respectively 1.30, 1.31 and 1.31, with an average for all years of 1.31. For practical purposes a conversion factor of 1.3 may be found satisfactory for converting the length of landed salt fish into live length in the Northwest Atlantic area.

Table 1 - Conversion Factors, West Greenland Cod, 1955  
110 ind. weighed and measured

	55	60	65	70	75	80	85	90	95	Average
Length of live fish cm.										74.10 cm.
No. of ind.	4		19	23	28	22	11	3		3.39 kg.
Av. weight of live fish	2.07	2.35	2.82	2.82	3.30	4.26	4.57	6.58		2.28 "
" " dressed, headless	1.41	1.66	1.91	1.91	2.22	2.81	3.03	4.08		2.08 "
" " split cod, fresh	1.33	1.49	1.75	1.75	2.04	2.55	2.84	3.71		1.21 "
" " salted 14 days	0.83	0.90	1.04	1.04	1.20	1.47	1.53	2.04		1.16 "
" " salted 2 1/2 months	0.87	0.82	0.95	0.95	1.10	1.34	1.40	1.84		56.69 cm.
" length of salted fish cm.	46.25	49.25	53.48	55.04	62.05	63.18	71.67			
<b>Conversion factors:</b>										
A. From dressed to live weight	1.47	1.42	1.48	1.48	1.49	1.52	1.51	1.61		1.48
B. From split to live weight	1.56	1.58	1.61	1.61	1.62	1.67	1.61	1.77		1.63
C. From salted 2 1/2 months to live weight	2.38	2.87	2.97	2.97	3.00	3.18	3.26	3.58		2.92
D. From salted " " " dressed weight	1.62	2.02	2.01	2.01	2.02	2.10	2.16	2.22		1.97
E. From salted " " " split weight	1.53	1.82	1.84	1.84	1.85	1.90	2.03	2.02		1.79
F. From salted length to live length	1.30	1.32	1.31	1.31	1.36	1.29	1.35	1.26		1.31

Table 2 - Conversion Factors, West Greenland Cod, 1953-1954-1955  
298 ind. weighed and measured

	55	60	65	70	75	80	85	90	95	100	105	Average
Length of live fish cm.												74.85 cm.
No. of ind.	3	17	43	52	64	70	34	10	3	-	2	3
Av. weight of live fish	1.50	2.05	2.44	2.92	3.54	4.23	5.02	6.26	6.66	-	10.74	3
" " dressed, headless	0.93	1.39	1.67	1.94	2.30	2.72	3.21	3.93	4.22	-	6.70	2
" " salted 15 days	0.64	0.80	0.91	1.03	1.22	1.42	1.64	2.03	1.98	-	3.61	1.25
" " salted 2 months	0.61	0.76	0.85	0.96	1.14	1.34	1.54	1.89	1.91	-	3.34	1.18
" length of salted fish cm.	43.35	46.18	50.35	53.27	57.42	71.86	64.12	67.50	71.67	-	82.50	57.35
<b>Conversion factors:</b>												
A. From dressed to live weight	1.61	1.47	1.46	1.51	1.54	1.56	1.56	1.59	1.58	-	1.60	1.54
B. From salted 2 months to live weight	2.46	2.70	2.87	3.04	3.11	3.16	3.26	3.31	3.49	-	3.22	3.11
C. From salted " " " dressed weight	1.52	1.83	1.96	2.02	2.02	2.03	2.08	2.08	2.21	-	2.01	2.03
D. From salted length to live length	1.27	1.30	1.29	1.31	1.31	1.29	1.33	1.33	1.33	-	1.27	1.31

