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DANISH RESEARCH REPORT

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Cod in West Greenland Coastal Waters and Offshore Banks, 19541. Occurrence of cod eggs and larvae (See Figure 1)

The catches of cod larvae from the "Dana" show a more scattered distribution in 1954 than in 1953. The largest numbers were taken on stations between 66°NL and 67°NL. In contrast to 1953, some cod larvae were taken south of 64°NL. Catches of cod larvae on two stations on the section Cape Farewell-Hamilton Inlet indicates probably a drift of cod fry from spawning grounds outside the West Greenland area (Iceland?).

2. Composition of year classes in catches of cod (See Figures 2 & 3)a. Offshore banks.

A total of 3,088 cod otoliths have been collected in offshore water. Of these, 2,298 were collected by the "Dana" from hand-line catches on the fishing banks; 281 from long-line catches from the "Adolf Jensen" (No.8); 267 from long-line catch of a Portuguese dory vessel (No.2), and 242 from otter trawl catches of a Faroese trawler (No.9).

The age distribution and the length distributions of the samples are given on the map Figure 2. The sample from the west coast of Disko (No.1) differs from the other samples in that the 1942 year-class predominates and the 1947 year-class is less well represented. As in 1953 the 1947 year-class was the predominating one with the one exception (No.1) noted. In each of the fourteen catches examined, it amounted to more than 20%, in twelve to more than 30%, in nine to more than 40% and in eight to more than 50%. In one sample it amounted to more than 60% (No.5) (percentages by number).

The 1945 year-class was of much less importance than in previous years, amounting to less than 20% in all samples with the exception of the sample from Dana Bank (26.8%).

The 1942 year-class was very poorly represented in the samples with exception of sample 1 where it predominated (31.2%). Of the remaining samples, only one (No.8) yielded more than ten percent (10.8%).

Year-classes older than the year-class 1942 occurred in very small amounts. Among these the 1934 year-class (20 years old) and the 1936 year-class (18 years old), which predominated in the catches during previous years, were represented in five samples.

A new year-class, 1950, entered the catches on the banks in 1954. In 1953 a few specimens belonging to this year-class were taken, and it was expected that it would occur in the catches in 1954, especially on the northern banks. In samples 3 and 4, from Store Hellefiske Bank, it amounted to 26 and 17.2% respectively. In all the other samples it did not exceed 10%, with the exception of No.14 where it amounted to 12.2%.

Owing to the small size of the individuals (40 to 50 cm.) such a young year-class is seldom represented in catches on the offshore banks. Judging then from its relative abundance in the 1954 catches

the 1950 year-class might possibly be a rather rich year-class which will be of importance to the commercial fishery in the coming years.

Sample 2 was obtained from the catches of Portuguese fishermen who discard small fish. This could account for the absence of the 1950 year-class from the sample.

b. Coastal waters and fjords. (See Figure 3 and Table 2)

A total of 2,762 otoliths have been collected in coastal waters and fjords from the catches of the "Adolf Jensen" and from the catches of the Greenlanders at the different fisheries stations. The age distributions are given in Figure 3. The different graphs in the figure include samples from adjacent localities and sometimes samples taken at different times of the year. The material was collected and treated in the same way as in previous years (See Ann. Biol. Vol. X, 1953, p.47-49).

The 1947 year-class predominated in the samples with exception of two, A and H. In A which came from a fishery station near the northern limit for cod, the 1942 year-class was predominant with 29.8% (compare the northernmost offshore sample, No.1 in Figure 2). The 1934 and 1936 year-classes amounted to 16.2 and 11.6% respectively. This confirms that the very old age-groups of cod are congregated in the northernmost part of the area.

Samples B and C consisted mainly of the predominating 1947 year-class and all other year-classes were without significance.

In D, which included samples from coastal waters and from the Godthab Fjord, there was a more even distribution of the year-classes, and the older year-classes, 1940 and 1942, were represented with more than 10% each, but the 1947 year-class was still predominant (29.1%). In samples F and G this year-class still predominated, while in H the 1945 year-class was the best represented (36.6%). As in 1953, the 1945 year-class was more strongly represented in the southern catches than in the northern catches, but it is also clear that it had decreased in 1954. The reduction of the 1945 year-class resulted in a decrease in the output of the cod fishery in Frederikshab and Julianehab districts ( $60^{\circ}-62^{\circ}30'NL$ ). The question is now - what has happened to the 1945 year-class? Two obvious answers exist: 1) high mortality caused by overfishing, and 2) migrations to other areas.

As for 1, it is a fact that very extensive trawl fishery has been carried out, mainly by United Kingdom trawlers, in the open sea off the coast of Julianehab district. From the U.K. report (see ICNAF Ann. Proc. Vol.3, p.47, 1953), it appears that the fishery has been supported chiefly by the 1945 year-class, which in 1952 made up about 60% of the trawl catches. There could be reason to believe that the heavy exploitation by trawlers of a stock which consists chiefly of a single year-class, and which occur in a rather limited area, would be disastrous.

As for 2, tagging experiments have shown that an extensive migration of cod from Julianehab district took place in the thirties. The small percentage of recaptures in Icelandic waters of cod tagged off West Greenland in the years after the war does not support the idea of an extensive migration to Iceland.

On the other hand according to verbal information given by Mr. Jonsson, the 1945 year-class occurred in the spawning shoals off Iceland in the spring of 1954 in a quantity about 25% more than he had calculated in advance. This fact indicates an immigration of cod of this year-class from other regions, probably from South Greenland.

This is not in agreement with the few recaptures off Iceland of tagged Greenland cod as mentioned above. A possible explanation is that a great emigration of cod of the 1945 year-class took place from the southernmost districts in Greenland but that a large proportion of these emigrants did not succeed in reaching the Icelandic spawning grounds. Instead they strayed out into the open sea where they perished. One recapture in the Lofoten area at Norway of a tagged Greenland cod probably supports this hypothesis. The recapture in question was of a cod with a total length of 69 cm. at recapture, and an age of nine years; year-class 1945. The place of recapture was Røst, position 67°20'N, 13°30'W. It was recaptured in the middle of April 1954 by a German trawler. The cod was tagged September 18, 1952, off Nanortalik, 60°10'N, 45°28'W. A yellow plastic tag was used.

Of the year-classes younger than the 1947 year-class, the 1950 year-class was most strongly represented in the catches from the coastal area. This was also the case with the catches from the banks. The cod of this year-class are small, mostly below 50 cm., and are discarded by the fishermen as undersized. Therefore it only appears on a modest scale in the samples in Figure 3. The 1950 year-class amounted to about 20% of sample E which was collected exclusively for age analysis. The 1950 year-class occurred in rather large numbers in catches from Julianehåb district made with fine meshed seine nets and with small jiggs especially for taking small cod. There is reason to believe that this year-class will be of importance in the fishery in the future.

Among the smallest cod, I-III group, the I-group (1953 year-class) was observed in rather large shoals close to the shore and it was caught by seine in large numbers at Holsteinsborg and in Julianehåb district.

### 3. Length measurements of cod from the banks (See Figure 2 & Table 1)

The length distributions in 5 cm. groups are given in Figure 2. The numbers on the graphs correspond with the numbers of the age analyses to the left on Figure 2. If we ignore sample No.1, we see that the peaks on the graphs lie between 60-65 and 65-70 cm. corresponding with the age compositions of the samples in which the 1947 year-class is strongly predominating. In samples No.3 and 4, the 1950 year-class appears very strongly. The length compositions of the catches in 1954 are much more even than those of 1953. The catches contained fewer big cod, especially on the middle and southern banks, but the great bulk of the cod was of a more valuable size for salting than in 1953 in which year a large number of undersized cod occurred in the catches. The better sizes were due to the growth of the predominating 1947 year-class, which in 1954 had a mean size between 60-65 cm. corresponding to mean weights between about 2-2.5 kg. (round fresh weight).

In this connection, it is worth mentioning that the quality of the cod was good during the whole season in contrast to 1953 when the cod was very lean and with low liver content, especially in the first part of the fishing season.

The good quality and the high liver content was the result of good feeding conditions in 1953 when large amounts of valuable cod food as capelin (*Mallotus*), sandeels (*Ammodytes*), small cephalopods (*Gonatus*), occurred. The occurrence of cod food was very poor in the cold year 1952, and the quality of the cod was very bad in the following year as mentioned above.

In 1954 the feeding conditions for cod were favourable, as in 1953, so that there is reason to expect that the cod in 1955 will also be of good quality.

#### 4. Tagging experiments (See Tables 3 and 4)

A total of 3,801 cod have been tagged in 1954; 2,004 on the offshore banks and 1,797 in coastal waters and in the fjords. From these experiments, 102 recaptures have been taken in 1954. A total of 424 recaptures were reported in 1954 from all the tagging experiments. 400 were from Greenland waters and 24 from Iceland. In Table 3 a survey of the recaptures is given according to age groups and year classes, year of tagging and whether the recapture has been made off Greenland or off Iceland.

The recaptures off Iceland have only amounted to 7.5%, (recaptures from the tagging experiments in 1954 omitted). This was a lesser percentage than in 1953 when it was 13.3% (in the report it was given as 14.2%, but thirteen recaptures from Greenland in 1953 were sent to us in 1954).

The three rich year-classes, 1947, 1945 and 1942, amounted to 69.3% of the age analysed recaptures from Greenland, while only two year-classes, 1944 and 1945, were found in the recaptures from Iceland. There were four times as many cod of the 1945 year-class as there were of the 1944 year-class. As stated above, the results of the tagging experiments have given no evidence of an extensive migration to Iceland as in the 'thirties.

There was a recapture from Lofoten in Norway (see p.3 of this report). It was the second example of a cod which has migrated from Greenland to northeastern Europe. The first was a cod which was tagged off Nanortalik September 22nd, 1932, and recaptured March 2nd, 1938, off Cape Kanin (See Rapp. et Proc. Verb. Vol. CXXIII 1949 p.59).

The age determinations of cod recaptured in Greenland waters show that the 1947 year-class was represented with the highest number (76), next the 1945 year-class (44), the 1942 year-class (27), and the 1940 year-class (21). In the recaptures from Iceland, only two year-classes occurred, namely 1944 and 1945, with 3 and 11 specimens respectively. The strong 1947 year-class was not represented in the recaptures from Iceland whose ages could be determined.

Of the 23 recaptures from Iceland, 14 originated from tagging experiments in Julianehåb district, 3 were tagged on Store Hellefiske Bank, 1 on Lille Hellefiske Bank, 2 on Fylla Bank, 1 on Fiskenaes Bank, 1 was tagged in coastal waters in Sukkertoppen district, and 1 was tagged in Ameralik Fjord in Godthåb district.

Of special interest are two recaptures of cod on Store Hellefiske Bank. Both were tagged with hydrostatic tags (Lea tags) in 1949. One was tagged in Umanak Fjord. It measured 19 cm. when tagged and was recaptured 225 miles south of the tagging locality. The other was tagged off Ritenbenk ( $69^{\circ}44'N$ ,  $51^{\circ}20'W$ ). Its total length when tagged was 24 cm. and it was recaptured 150 miles south of the tagging locality.

Table 4 gives the number of recaptures reported from the different nations from Greenland and Iceland in 1953 and 1954. The large number of recaptures taken by Portuguese fishermen is remarkable, even if we take into consideration the fact that extensive tagging was carried out on the Store Hellefiske Bank, where the largest number of Portuguese vessels were fishing at the very time of tagging. If we leave out the recaptures in the year of tagging, the number of recaptures by Portuguese ships were in 1953, 27, and in 1954, 185.

- THE END -

Table 1

Year-Class	Age	Off Disko 69°27'N, 54°22'W			Store Hellefiske Bank 67°55'N, 54°20'W			Store Hellefiske Bank 68°03'N, 54°42'W			Store Hellefiske Bank 66°52'N, 54°29'W		
		31/7	♂♂	♀♀	14/7	♂♂	♀♀	1-2/8	♂♂	♀♀	3/8	♂♂	♀♀
1950	IV				0.4	50.0	-	26.0	44.8	45.3	17.2	46.1	46.6
1949	V				2.2	53.0	45.8	1.9	52.0	50.0	0.9	52.0	56.0
1948	VI	3.5	52.0	58.5	15.4	59.3	59.5	14.6	58.2	55.8	11.4	58.5	62.8
1947	VII	25.6	61.6	64.7	59.5	63.3	65.3	50.1	63.1	63.3	54.1	65.0	65.7
1946	VIII	5.8	68.0	68.0	4.5	74.3	70.8	2.1	63.3	63.5	3.1	70.7	70.8
1945	IX	18.6	70.3	71.7	6.7	77.0	73.7	3.4	71.4	78.3	7.5	75.7	78.6
1944	X	1.2	77.0	-	2.2	73.0	84.3	0.3	67.0	-	0.9	76.0	81.0
1943	XI	7.0	79.7	75.7	0.7	73.0	94.0	0.8	81.5	76.0	1.3	77.0	82.0
1942	XII	31.2	78.2	80.2	6.4	83.4	87.5	0.8	74.0	88.0	1.8	79.0	78.5
1941	XIII	2.3	89.0	87.0	-	-	-	-	-	-	0.4	84.0	-
1940	XIV	1.2	-	80.0	-	-	-	-	-	-	0.4	-	-
1938	XV	3.5	96.0	111.0	-	-	-	-	-	-	0.4	-	-
1934	XX										0.9	84.0	85.0
Total number		86			267			376			227		
Depth in m.		30-50			-			29			30		
Temperature °C.		2.1						3.7			3.5		

Table 1 (cont'd)

Year-Class	Age	5 Lille Hellefiske Bank 65°01'N, 53°22'W				6 Banana Bank 64°27'N, 53°13'W				7 Fylla Bank 64°10'N, 52°51'W				8 Fylla Bank 64°04'N, 53°22'W			
		♂%	cm	♀%	cm	♂%	cm	♀%	cm	♂%	cm	♀%	cm	♂%	cm	♀%	
1950	IV	4.3	43.6	47.3	8.3	44.6	45.3	7.3	47.0	49.5	0.7	-	-	46.5	-	49.0	
1949	V	2.8	54.0	57.3	3.3	52.7	54.0	2.0	57.0	52.7	0.4	-	-	60.8	-	64.7	
1948	VI	9.2	60.6	58.8	6.1	55.0	58.6	13.2	60.8	62.0	8.3	58.9	62.4	44.2	44.7	64.7	
1947	VII	63.4	63.7	64.9	55.5	64.9	66.2	55.6	64.6	65.8	44.7	70.2	70.6	-	-	70.6	
1946	VIII	4.9	70.3	69.4	6.0	72.0	71.5	4.4	70.2	68.4	4.7	-	-	72.4	-	72.4	
1945	IX	9.2	70.9	75.4	11.7	74.2	75.7	8.8	72.5	74.1	14.7	71.4	-	75.2	-	75.2	
1944	X	-	-	-	-	82.0	-	1.5	78.0	70.0	1.4	77.0	-	73.3	-	73.3	
1943	XI	1.2	-	78.5	1.1	80.0	85.0	1.5	70.5	74.0	1.4	70.0	-	82.8	-	82.8	
1942	XII	4.6	75.1	84.0	4.4	82.5	82.8	2.9	77.5	84.5	10.8	84.3	-	96.3	-	96.3	
1941	XIII	-	-	-	-	80.0	95.0	0.5	-	103.0	1.8	88.5	-	85.5	-	85.5	
1940	XIV	-	-	-	0.6	-	89.0	0.5	-	84.0	2.2	-	-	85.6	-	85.6	
1939	XV	0.9	85.0	94.0	-	-	-	0.5	78.0	1.0	104.0	+	83.0	-	-	84.8	
1938	XVI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	93.8	
1937	XVII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84.8	
1936	XVIII	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85.6	
1935	XIX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85.6	
1934	XX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84.8	
Total number		325		180		204		281									
Depth in m.		40-60		43-50		40		-									
Temperature °C.		-		-		2.6		-									

Table 1 (cont'd)

Year-Class	Age	Fylla Bank			Off Faeringehavn			Fylla Bank			Fiskskæns Bank		
		9 63°53'N, 53°22'W 29/4	♂♂ cm	♀♀ cm	10 63°38'N, 51°41'W 13/7	♂♂ cm	♀♀ cm	11 63°41'N, 52°27'W 8-9/8	♂♂ cm	♀♀ cm	12 63°26'N, 51°59'W 16/8	♂♂ cm	♀♀ cm
1950	IV	3.3	47.3	43.5	5.5	53.7	46.6	6.6	48.4	43.3	12.2	47.1	40.5
1949	V	6.6	53.8	51.7	7.0	56.0	56.3	4.4	50.3	52.3	9.6	54.6	61.3
1948	VI	12.0	56.5	57.5	8.5	57.3	59.8	4.4	64.3	59.3	7.0	56.6	58.7
1947	VII	14.6	62.2	64.2	59.5	63.6	64.5	59.5	64.5	66.1	39.1	64.0	66.7
1946	VIII	10.7	67.0	67.0	55.5	67.8	71.6	2.9	73.3	71.0	6.1	65.0	70.8
1945	IX	14.5	78.5	78.3	12.5	70.6	76.0	13.2	73.4	75.4	12.2	73.4	75.0
1944	X	2.1	83.0	80.3	1.0	74.5	-	0.7	76.0	79.0	3.5	76.8	-
1943	XI	0.8	75.0	-	-	-	-	0.7	73.8	79.0	7.8	75.6	101.0
1942	XII	2.9	78.7	82.0	1.0	-	79.0	4.4	-	-	-	-	-
1941	XIII	-	-	90.0	-	-	-	-	-	-	-	-	-
1940	XIV	-	-	-	-	-	-	-	-	-	-	-	-
1937	XV	-	-	-	-	-	-	-	-	-	-	-	-
1936	XVI	-	-	-	-	-	-	-	-	-	-	-	-
1934	XVII	-	-	-	-	-	-	-	-	-	-	-	-
Total number		238			201			136			115		
Depth in m.		150			-			45			43		
Temperature °C.		0.8			-			-			1.7		

Table 1 (cont'd)

Year-Class	Age	13			14			15		
		Dana Bank 62°47'N, 51°12'W 17/8	Bank 62°15'N, 50°47'W 17/8	%	♂	cm	♀	%	♂	cm
1950	IV	1.1	45.0	53.0	1.2	45.0	-	-	-	-
1949	V	6.5	58.0	50.7	14.5	55.4	55.2	-	-	-
1948	VI	5.8	61.3	62.0	3.6	60.5	59.0	-	-	-
1947	VII	35.9	64.3	67.1	39.4	62.4	65.1	-	-	-
1946	VIII	13.4	67.1	70.3	5.5	68.8	71.8	-	-	-
1945	IX	26.8	71.2	74.0	20.0	71.6	79.9	-	-	-
1944	X	1.4	72.8	-	1.2	67.0	-	-	-	-
1943	XI	1.1	69.0	76.0	1.2	-	84.0	-	-	-
1942	XII	6.9	74.3	78.5	9.6	76.0	80.4	-	-	-
1941	XIII	0.7	76.0	75.0	1.8	82.7	-	-	-	-
1940	XIV	0.4	-	87.0	0.6	78.0	-	-	-	-
1936	XVIII	-	-	-	0.6	85.0	-	-	-	-
1934+	XX	-	-	-	0.6	83.0	-	-	-	-
Total number		276			162					
Depth in m.		52			55					
Temperature °C.		0.5			0.14					

Table 2.

<u>Year-Class</u>	<u>Age</u>	A	B	C	D	E	F	G	H
1950	IV	5.0	6.5	9.1	20.6	0.5	12.2	5.3	
1949	V	2.4	1.0	3.7	6.3	1.5	13.1	17.1	
1948	VI	10.7	14.0	4.7	11.1	4.5	2.7	1.6	
1947	VII	2.0	67.8	74.5	29.1	33.3	49.0	29.5	31.2
1946	VIII	0.8	1.5	0.3	2.4	1.0	0.2	0.7	
1945	IX	7.5	6.0	1.5	11.5	11.9	14.5	19.4	36.6
1944	X	1.5	0.6	0.5	1.7	4.8	2.5	0.5	1.4
1943	XI	4.0	1.4	0.5	1.4	1.6	1.0	1.2	0.9
1942	XII	29.8	4.0	0.5	15.9	1.6	17.5	9.7	3.5
1941	XIII	5.1	0.1	1.0	12.0	12.2	6.0	0.5	
1940	XIV	13.6	0.8		1.7	1.7	0.5	0.5	0.7
1939	XV	6.1			3.7	3.7	0.5	1.0	0.2
1938	XVI	1.0			1.4	2.4	0.2		
1937	XVII	0.5					4.7	0.2	
1936	XVIII	11.6	0.4					0.2	
1935	XIX	0.5							
1934	XX	16.2	0.1						
1933	XXI	0.5							
1932	XXII							0.5	
Total number		198	907	200	296	126	200	403	432

Coastal waters and fjords. Cod whose ages were determined - 1954.

Table 3. Recaptures from 1954 of age determined cod tagged in different years' tagging experiments.

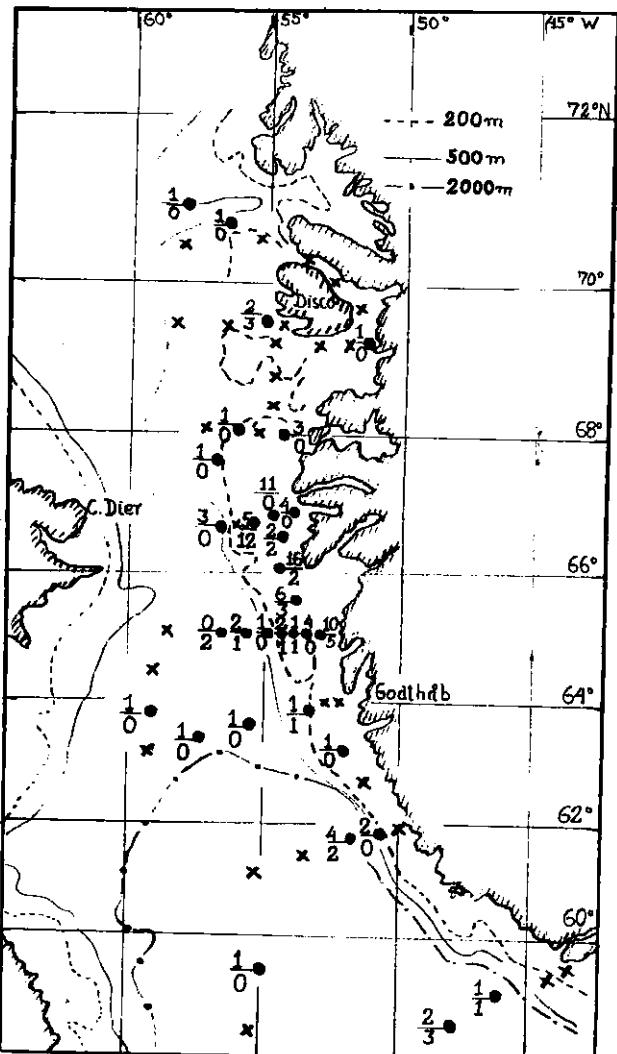
Year-Class	Age Group	Year of Tagging										Total		
		1946 Gr.	1948 Ic.	1949 Gr.	1950 Ic.	1951 Gr.	1952 Ic.	1953 Gr.	1954 Ic.	Gr.	Gr.	Gr.	Gr.	Gr.
1934	XX													
1936	XVIII	1												
1937	XVII		1											
1938	XVI													
1939	XV													
1940	XIV													
1941	XIII													
1942	XII													
1943	XI													
1944	X													
1945	IX													
1946	VIII													
1947	VII													
1948	VI													
1949	V													
??		1	2	1		6	3	47	5	94	1	37	188	9
		2	0	4	0	6	1	7	1	14	5	92	142)	173
														3
														102
														0
														400
														242)

1) % of cod whose ages have been determined.

2) Including one recaptured off Lofoten, Norway.

Table 4.

Nations	Recaptures from	Greenland		Iceland	
		1953	1954	1953	1954
Denmark		38	10		
Greenland		87	98		
Faroes		6	7		
Norway		11	12		
Iceland		26	6	22	10
United Kingdom		15	10	2	3
France		11	7		
Germany			1	3	
Portugal		39	247		10
Spain			2		
Total		233	400	27	23



**Figure 1.** Catches of cod larvae per 30 minutes haul with 2 m. stramin bag from the "Dana" July-August 1954. Numbers in hauls with a 0-100 m. wire and with a 100-200 m. wire are shown respectively above and below the line.

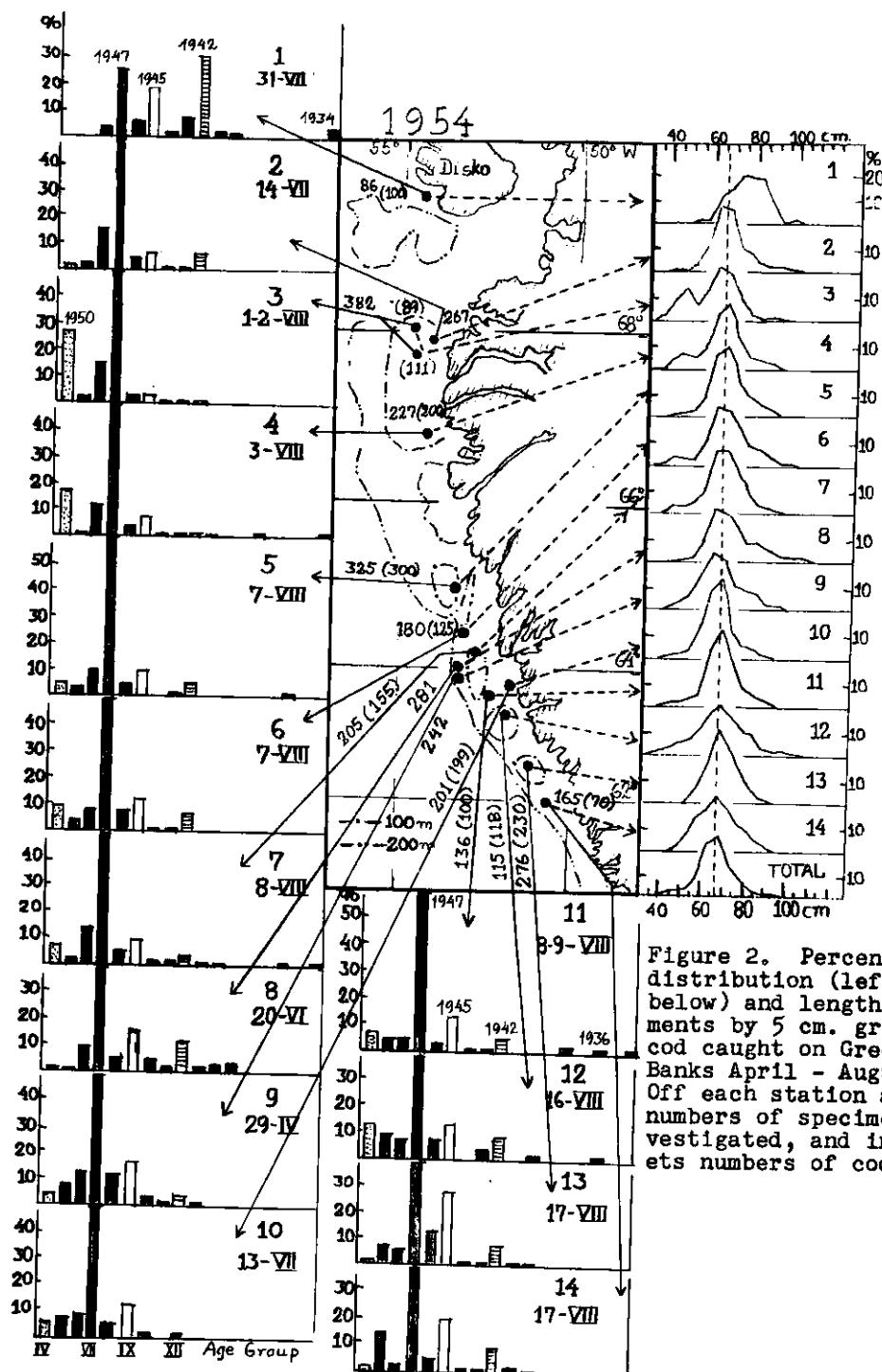


Figure 2. Percentage age distribution (left and below) and length measurements by 5 cm. groups of cod caught on Greenland Banks April - August 1954. Off each station are given numbers of specimens investigated, and in brackets numbers of cod tagged.

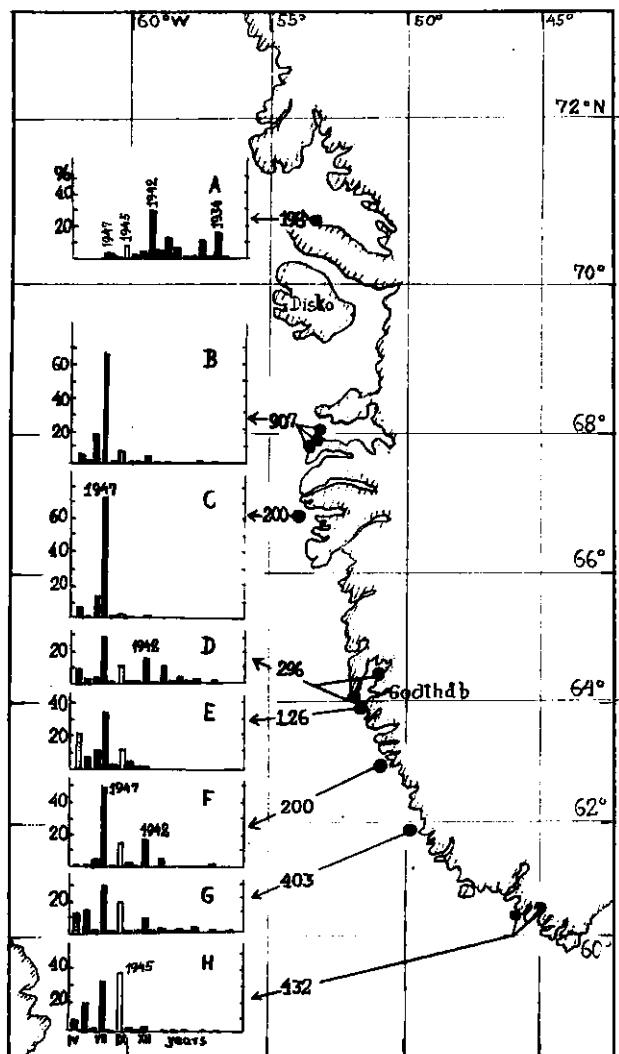


Figure 3. Percentage age distribution of cod caught in Greenland coastal waters and fjords in 1954. Off each station are given numbers of specimens investigated.

Hydrographic Conditions in the  
Eastern Part of Labrador Sea and Davis Strait, 1954

The data from the hydrographic stations worked by the Danish R/V "Dana" during July 1954 are given in the following appendix.

The temperature distribution shows that the conditions this year were about normal in July. The Arctic component of the West Greenland current is found nearest the coast, but its water masses were not very cold. The core of the warm Irminger current is found off the slope of the banks. North of the Fylla Bank section (III) it is mainly found as an undercurrent. Between section III and IV a part of the current turns westward where it joins the Baffin Land Polar current.

Phosphate determinations were carried out in the upper 100 metres. Fig.2 shows the distribution of phosphate at 20 metres. High concentrations of phosphate were found in two areas, one maximum was found off the slope of the southwest Greenland banks nearly following the core of the warm current and another was found where the sections intersect the boundary of the Baffin Land and Labrador Polar Current.

The conditions are further illustrated by the vertical sections I to VIII, the location of which is shown in the map following Figure 1. Of special interest is the Fylla Bank section (III), which was worked by M/K "Adolf Jensen" in April and June and by R/V "Dana" in July. In April the influence of the cooling during the very cold winter was very pronounced. Water with negative temperature was found from surface to bottom over and inside the bank. On the west side of the bank the temperatures were higher on account of the influence of the Irminger Current and here negative temperatures were found only in the upper 75 metres. The June section indicates that a rather rapid increase in temperature had taken place since April. Water with negative temperature was not found, and over the shallow part of the bank the temperature exceeded 2°C. This rise in temperature continued to July, where the section was worked by "Dana". Specially the warm undercurrent with temperature above 4°C. increased much in thickness.

Compared with the temperatures in July 1953, it was found that the upper layers were about 1° colder in 1954 than in 1953.

Frede Hermann.

Danmarks Fiskeri- Og Havundersøgelser  
Hydrografisk Laboratorium  
Charlottenlund Slot  
Denmark

Section I - The Faroes to East Greenland - June 29th-July 5th

Section I (cont'd)

Station position- 62°00'N, 18°45'W,  
Depth--1900 m., Date--1 July, 1954

m. t° S°/oo O<sub>2</sub>°/o P

0	10.98	35.23	0.4
20	.58	.24	0.4
30	.54	.24	0.4
50	9.47	.27	1.0
75	8.95	.28	
100	.78	.24	1.2
150*	.63	.27	
200	.46	.26	
300**	.37	.26	
400	.39	.28	
600	.22	.26	93.9
795	7.18	.15	78.5
995	5.86	.096	82.2
1195	4.93	.051	86.5
1490	.20	.052	86.1
1840	2.84	.002	84.7

\* 10°

\*\* 5°

Station position- 62°00'N, 21°00'W,  
Depth--1700 m., Date--2 July, 1954

m. t° S°/oo O<sub>2</sub>°/o P

0	10.6
10	10.6
20	10.6
30	10.6
50	9.7
75	8.8
100	8.7
143	8.6

Station position- 62°00'N, 23°20'W,  
Depth--1450 m., Date--2 July, 1954

m. t° S°/oo O<sub>2</sub>°/o P

0	10.1
10	10.1
20	10.1
30	10.1
50	9.9
75	8.6
100	8.4
143	8.2

Station position- 62°00'N, 25°10'W  
Depth--1450 m., Date--2 July, 1954

m. t° S°/oo O<sub>2</sub>°/o P

0	9.9
10	9.9
20	9.9
30	9.9
50	9.9
75	8.7
100	8.2
142	8.2

\* 10°  
\*\* 15°

Station position- 62°00'N, 26°50'W,  
Depth--1120 m., Date--3 July, 1954

m. t° S°/oo O<sub>2</sub>°/o P

0	9.7
10	9.7
20	9.7
30	9.7
50	9.7
75	8.1
100	7.7
139	7.4

Station position- 62°00'N, 28°00'W,  
Depth--1400 m., Date--3 July, 1954

m. t° S°/oo O<sub>2</sub>°/o P

0	9.1
10	9.2
20	9.2
30	9.2
50	7.9
75	7.1
100	6.9
143	6.7

Station position- 62°00'N, 30°00'W,  
Depth--2050 m., Date--3 July, 1954

m. t° S°/oo O<sub>2</sub>°/o P

0	9.08	35.00	0.4
20	.07	34.99	0.4
30	.00	.98	0.5
50	7.23	35.03	1.0
75	6.20	34.99	
100	5.63	35.01	1.2
150	.21	34.98	
200*	4.90	.97	
300*	.50	35.04	
395	.37	34.97	
595	.09	.99	86.4
790	3.62	.92	88.9
990	.66	.951	88.0
1190	.65	.948	87.3
1485	.60	.968	85.7
1980	.24	.962	113.1

\* 10°

Station position- 62°00'N, 32°20'W,  
Depth--2600 m., Date--3-4 July 1954

m. t° S°/oo O<sub>2</sub>°/o P

0	8.82	34.98	0.5
20*	.54	.99	0.5
30**	.51	.97	0.5
50**	6.11	.93	1.1
75*	5.69	.96	
100**	.33	.96	1.2
150*	4.88	.96	
200	.51	.99	
300	.11	.94	
395	.00	.93	
595	3.75	.91	90.3
795	.68	.94	89.4
995	.54	.906	89.8
1195	.50	.917	93.1
1480	.55	.921	87.5
1975	.36	.959	84.9
2465	2.94	.941	84.7

Section I (cont'd)

Station position- 62°00'N, 34°08'W, Depth--2800 m., Date 3-4 July, 1954				Station position- 62°00'N, 37°20'W, (cont'd)					
m.	t°	S°/oo	O <sub>2</sub> °/o	P	m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	7.92	34.92		0.7	995	.52	.903		
20	.80	.94		0.7	1195	.41	.903		
30	.26	.95		0.7	1500	.46	.933		
50	5.53	.93		1.1	1995	.18	.957		
75	4.89	.92			2395	1.76	.895		
100	.79	.95		1.3					
150	.47	.95							
200*	.28	.96							
300	3.97	.93							
390	.83	.96							
585	.79	.92	92.0		0	9.18	35.00		0.9
765	.52	.89	97.6		10	8.32	.00		
950	.52	.908	92.1		20	7.80	.01		0.7
1140	.41	.895	90.9		30	6.30	.02		1.1
1500	.38	.903	90.8		50	.14	.03		1.2
2000	.38	.950	85.5		75	5.92	.05		
2500	.00	.951	85.7		100	.73	.03		1.3
2700	2.62	.928	86.6		150	.51	.03		
* 10°					200	.09	34.97		
					300	4.70	.97		
					400	.32	.96		
Station position- 62°00'N, 35°45'W, Depth--2800 m., Date--4 July, 1954				600	3.85	.93			
m.	t°	S°/oo	O <sub>2</sub> °/o	P	800	.62	.90		
0	8.20	34.93		0.5	1000	.46	.910		
20	7.55	.93		0.8	1200	.39	.908		
30	.34	.95		0.9	1500	.42	.948		
50*	5.56	.95		1.2	1900	2.32	.899		
75	.23	.95							
100*	4.84	.96		1.3					
150	.40	.95							
200	.20	.95			0	8.62	34.92		0.7
300	3.92	.95			10	.32	.99		
390	.80	.91			20	7.88	35.04		0.8
590	.61	.92	91.2		30	6.91	.03		1.0
785	.55	.92	91.2		50	.57	.10		1.1
985	.50	.908	92.1		75	.07	.06		
1185	.44	.906	90.7		100	5.96	.06		1.2
1500	.43	.919	91.7		150	.72	.05		
2000	.34	.959	86.4		200	.41	.05		
2500	2.84	.933	93.5		300	4.96	.03		
2701	1.71	.892	91.2		395	.53	34.97		
* 10°					595	4.12	34.97		
					795	3.78	.96		
					995	.55	.921		
Station position- 62°00'N, 37°20'W, Depth--2500 m., Date--4 July, 1954				1190	.36	.933			
m.	t°	S°/oo	O <sub>2</sub> °/o	P	1490	2.92	.924		
0	8.84	34.96		0.5	1590	.64	.915		
20	.17	.96		0.7					
30	6.96	.96		0.9					
50	5.90	35.01		1.0					
75	.30	34.98							
100	.00	.98		1.4					
150	4.72	.96							
200	.43	.94							
300	.18	.94							
400	3.94	.94							
595	.67	.93							
795	.59	.91							

Section I (cont'd)

Station position- 62°00'N, 40°09'W, Depth--1380 m., Date--5 July, 1954					Station position- 62°06'N, 40°31'W, Depth--1180 m., Date--5 July, 1954				
m.	t°	S°/oo	O <sub>2</sub> °/oo	P	m.	t°	S°/oo	O <sub>2</sub> °/oo	P
0	7.54	34.39		0.5	0	6.73	31.34		0.1
10	8.07	.97			10	4.90	33.69		
20	.12	35.03			20	7.53	35.02		0.5
30	7.70	.04			30	.00	.05		0.9
50	6.82	.05			50	6.89	.06		1.0
75	.43	.03			75	.45	.05		
100	.20	.06			100	.28	.06		1.1
150	5.90	.07			145*	5.29	.02		
200	.60	.04			175**	4.40	34.84		
295	.30	.03			265	.37	.84		
395	4.98	.03			365	.49	.89		
590	4.54	34.97			555	.78	.97		
790	.06	.97			750	.59	.96		
990	3.77	.928			945	.12	.950		
1180	.58	.930			1070	3.78	.944		
1310	.40	.930							
					* 15°				
					** 30°				
						5	5.42	33.17	
						15	.37	.87	

Section II - Off Frederikshab - July 11th-12th

Station position- 61°00'N, 55°10'W, Depth--2800 m., Date--11 July, 1954					Station position- 61°26'N, 53°25'W Depth--2900 m., Date--12 July 1954				
m.	t°	S°/oo	O <sub>2</sub> °/oo	P	m.	t°	S°/oo	O <sub>2</sub> °/oo	P
0	5.35	33.66		0.2	0	4.68	33.72		0.2
10	.28	.65			10	.52	.72		
20	3.80	.85			20	3.19	.79		0.2
30	.53	34.18			30	.27	34.03		0.3
50	.57	.54			50	.30	.58		1.2
75*	4.00	.72			75	.56	.61		
100	.21	.81			100	.85	.74		1.3
150	.32	.88			150	4.34	.82		
200	.34	.94			200	.38	.86		
300	.08	.93			300	.51	.89		
395	3.87	.93			395	.47	.89		
595	3.64	.93	87.8		595	4.23	.96		
795	.52	.90	91.0		795	3.90	.92		
990	.45	.903	92.3		990	3.66	.908		
1190	.36	.903	91.5		1190	3.50	.901		
1500	.36	.924	88.4		1485	3.31	.899		
2000	.06	.935	85.7						
2500	2.52	.926	87.0						
2706	2.05	.908	87.2						
* 10°									
Station position- 61°17'N, 54°18'W, Depth--3200 m., Date--11 July 1954					Station position- 61°34'N, 52°30'W, Depth--2900 m., Date--12 July 1954				
m.	t°	S°/oo	O <sub>2</sub> °/oo	P	m.	t°	S°/oo	O <sub>2</sub> °/oo	P
0	5.2				0	5.60	33.96		0.3
10	4.6				10	.35	.98		
20	3.9				20	.05	34.11		0.3
30	3.4				30	4.99	.24		0.4
50	3.5				50	.18	.45		0.4
75	3.8				75	.18	.63		
100	3.7				100	.27	.74		1.2
139	4.0				150	.26	.79		
					200	.11	.85		
					300	.21	.89		
					400	.31	.93		
					595	3.94	.93		

Section II (cont'd)

Section II (cont'd)

<u>Station position- 61°34'N, 52°30'W, (cont'd)</u>				<u>Station position- 61°57'N, 50°00'W, Depth--140 m., Date--12 July 1954</u>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
m.	t°	S°/oo	O <sub>2</sub> %	P	m.	t°	S°/oo	O <sub>2</sub> %	P																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
795	.74	.93			0	3.28	32.44		0.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
995	.60	.906			10	2.43	.63																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1195	.49	.908			20	1.79	.66		0.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
1490	.35	.901			30	.19	.79		0.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
					50	.08	.89		0.3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
<u>Station position- 61°41'N, 51°45'W, Depth--2800 m., Date--12 July 1954</u>					75	.33	33.20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					100	.54	.33		0.5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
m.	t°	S°/oo	O <sub>2</sub> %	P																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
0	4.73	33.68		0.2	<u>Section III-Fylla Bank-July 21-22</u>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
10	.47	.76			<u>Station position- 63°12'N, 59°10'W, Depth--850 m., Date--22 July, 1954</u>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
20	.73	34.13			m.	t°	S°/oo	O <sub>2</sub> %	P	m.	t°	S°/oo	O <sub>2</sub> %	P	30	5.04	.28			0	5.08	33.39		0.2	50	.16	.53			10	.03	.39			75	.10	.74			20	3.93	.49		0.2	100	4.56	.89			30	1.60	.64		0.25	150	.99	35.00			50	0.08	.71		0.4	200	.77	34.99			75	0.10	.80			301	.54	.99			100	0.61	34.00		1.2	400	.33	.96			150	2.29	.40			600	4.01	.94			203	3.29	.59			800	(3.72)	.92			300	4.06	.78			1000	3.58	.910			400	4.24	.87			1200	3.50	.919			600	4.22	.90			1496	3.36	.913			807	3.98	.93			<u>Station position- 61°47'N, 51°09'W, Depth--2750 m., Date--12 July 1954</u>					<u>Station position- 63°19'N, 58°15'W, Depth--1200 m., Date--22 July 1954</u>					m.	t°	S°/oo	O <sub>2</sub> %	P	m.	t°	S°/oo	O <sub>2</sub> %	P	0	3.06	32.90		0.3	0	5.52	33.42		0.25	10	.16	33.49			10	.51	.42			20	4.00	.93			20	.50	.43		0.25	30	.42	34.06			30	3.54	.59		0.3	50	.80	.21			50	2.31	.80		0.5	75	.52	.36			75	.19	34.10			100	.98	.67			100	.18	.28		1.2	150	5.28	.97			150	.78	.50			200	.13	.97			201	3.22	.63			300	4.75	.94			300	4.04	.83			390	.50	.96			400	.28	.88			590	4.17	.96			600	.06	.90			785	4.00	.96			800	3.88	.92			980	3.74	.928			1000	.58	.917			1175	3.55	.919			1145	3.40	34.912			1470	3.34	.924								<u>Station position- 61°52'N, 50°35'W, Depth--1280 m., Date--12 July 1954</u>					<u>Station position- 63°25'N, 57°20'W, Depth--1780 m., Date--21/22 July 54</u>					m.	t°	S°/oo	O <sub>2</sub> %	P	m.	t°	S°/oo	O <sub>2</sub> %	P	0	3.00	32.65		0.2	0	5.24	33.42		0.2	10	.17	33.15			10	.20	.40			20	.24	.77			20	0.94	.64		0.9	30	2.32	.82			30*	0.48	.70		1.0	50	1.79	.76			50	0.57	.78		1.0	75	.45	.88			75	0.76	.87			100	.53	.96			94**	1.10	.98		1.1	150	2.66	34.28			200***	3.06	34.58			200	4.08	.61			295	.79	.74			302	5.16	.92			395	4.24	.89			400	.04	35.06			595	.11	.90			600	4.47	34.95			790	3.84	.92			800	.18	.95			985	.74	.922			1000	3.94	.915			1185	.60	.919			1250	.48	.914							
m.	t°	S°/oo	O <sub>2</sub> %	P	m.	t°	S°/oo	O <sub>2</sub> %	P																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
30	5.04	.28			0	5.08	33.39		0.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
50	.16	.53			10	.03	.39																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
75	.10	.74			20	3.93	.49		0.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
100	4.56	.89			30	1.60	.64		0.25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
150	.99	35.00			50	0.08	.71		0.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
200	.77	34.99			75	0.10	.80																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
301	.54	.99			100	0.61	34.00		1.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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800	(3.72)	.92			300	4.06	.78																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1000	3.58	.910			400	4.24	.87																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1200	3.50	.919			600	4.22	.90																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1496	3.36	.913			807	3.98	.93																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
<u>Station position- 61°47'N, 51°09'W, Depth--2750 m., Date--12 July 1954</u>					<u>Station position- 63°19'N, 58°15'W, Depth--1200 m., Date--22 July 1954</u>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
m.	t°	S°/oo	O <sub>2</sub> %	P	m.	t°	S°/oo	O <sub>2</sub> %	P																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
0	3.06	32.90		0.3	0	5.52	33.42		0.25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
10	.16	33.49			10	.51	.42																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
20	4.00	.93			20	.50	.43		0.25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
30	.42	34.06			30	3.54	.59		0.3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
50	.80	.21			50	2.31	.80		0.5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
75	.52	.36			75	.19	34.10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
100	.98	.67			100	.18	.28		1.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
150	5.28	.97			150	.78	.50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
200	.13	.97			201	3.22	.63																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
300	4.75	.94			300	4.04	.83																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
390	.50	.96			400	.28	.88																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
590	4.17	.96			600	.06	.90																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
785	4.00	.96			800	3.88	.92																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
980	3.74	.928			1000	.58	.917																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1175	3.55	.919			1145	3.40	34.912																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1470	3.34	.924																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
<u>Station position- 61°52'N, 50°35'W, Depth--1280 m., Date--12 July 1954</u>					<u>Station position- 63°25'N, 57°20'W, Depth--1780 m., Date--21/22 July 54</u>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
m.	t°	S°/oo	O <sub>2</sub> %	P	m.	t°	S°/oo	O <sub>2</sub> %	P																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
0	3.00	32.65		0.2	0	5.24	33.42		0.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
10	.17	33.15			10	.20	.40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
20	.24	.77			20	0.94	.64		0.9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
30	2.32	.82			30*	0.48	.70		1.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
50	1.79	.76			50	0.57	.78		1.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
75	.45	.88			75	0.76	.87																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
100	.53	.96			94**	1.10	.98		1.1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
150	2.66	34.28			200***	3.06	34.58																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
200	4.08	.61			295	.79	.74																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
302	5.16	.92			395	4.24	.89																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
400	.04	35.06			595	.11	.90																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
600	4.47	34.95			790	3.84	.92																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
800	.18	.95			985	.74	.922																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1000	3.94	.915			1185	.60	.919																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1250	.48	.914																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

Section III (cont'd)

Station position- 63°25'N, 57°20'W, (cont'd)					Station position- 63°48'N, 53°56'W, Depth--1150 m., Date--21 July 1954				
m.	t°	S°/oo	O <sub>2</sub> °/o	P	m.	t°	S°/oo	O <sub>2</sub> °/o	P
1480	.41	.910		-	0	4.5			
* 10°	** 20°	*** 5°			10	4.4			
Station position- 63°31'N, 56°25'W, Depth--1400 m., Date--21 July 1954					20	4.1			
m.	t°	S°/oo	O <sub>2</sub> °/o	P	30	3.2			
0	5.58	33.53		0.2	50	3.0			
10	.55	.54			75	3.0			
20	.49	.56		0.2	100	3.5			
30	3.28	.65		0.3	139	3.5			
50	2.54	.99		0.9	Station position- 63°53'N, 53°22'W, Depth-- 285 m., Date--21 July 1954				
75*	.63	34.25			m.	t°	S°/oo	O <sub>2</sub> °/o	P
100	.80	.43		1.3	0	3.11	33.10		0.3
150	3.40	.65			10	.39	.21		
200	.70	.76		0.2	20	1.30	.28		0.5
290	4.22	.88			30*	.03	.39		0.8
390	.14	.90		0.3	50	0.93	.53		1.0
590	4.01	.94			75	0.99	.61		
790	3.87	.95		0.9	100	1.74	.91		1.1
985	3.61	.95			150	2.48	34.22		
					200	3.04	.40		
					258*	3.60	.61		
* 5°					* 5°				
Station position- 63°37'N, 55°30'W, Depth--1350 m., Date--21 July 1954					Station position- 63°55'N, 53°07'W, Depth-- 200 m., Date--21 July 1954				
m.	t°	S°/oo	O <sub>2</sub> °/o	P	m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	5.39	33.53		0.2	0	3.4			
10	.31	.56			10	3.1			
20	.16	.51		0.2	20	2.9			
30	3.63	.69		0.25	30	2.5			
50	2.35	34.06		1.0	50	1.8			
75	.48	.31			75	0.9			
100*	.92	.50		1.3	100	0.9			
150**	3.54	.70			139	0.8			
200**	.91	.78		0.9					
300	4.22	.89							
400	.13	.92							
600	3.96	.93							
800	.82	.93							
1000	.58	.924							
1297	3.40	34.930							
* 5°    ** 10°					Station position- 63°58'N, 52°44'W, Depth-- 40 m., Date-- 21 July 1954				
m.	t°	S°/oo	O <sub>2</sub> °/o	P	m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	2.91	33.06		0.25	0				
10	.77	.10			10				
20	.70	.10		0.4	20				
30	.70	.12		0.4	30				
38	.70	.11		0.4	38				
Station position- 63°45'N, 54°30'W, Depth--1050 m., Date--21 July 1954					Station position- 64°01'N, 52°19'W, Depth--250/190m., Date--21 July 1954				
m.	t°	S°/oo	O <sub>2</sub> °/o	P	m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	4.82	33.44		0.3	0	3.63	32.69		0.3
10	.79	.47			10	.63	.69		
20	.82	.47		0.3	20	.63	.76		0.3
30	.17	.66		0.3	30	.48	.82		0.3
50	3.49	.83		0.4	50	2.81	.98		0.4
75	2.59	34.22			75	.50	33.13		
100	3.20	.44		1.3	100	1.74	.36		1.0
150	.93	.70			150	.30	.47		
204	.66	.72			180	1.37	33.55		
300	4.23	.89							
400	.17	.90							
600	.02	.94							
800	3.78	.96							
995	.50	.96							

Section IV - Across Store Hellefiske Bank - July 24th-25th

Station position- 66°53'N, 54°10'W, Depth-- 60 m., Date-- 24 July, 1954					Station position- 66°41'N, 56°38'W, Depth-- 165 m., Date-- 25 July, 1954				
m.	t°	S°/oo	O <sub>2</sub> %	P	m.	t°	S°/oo	O <sub>2</sub> %	P
0	3.40	33.35		0.2	0	4.16	33.48		0.0
10	.20	.38			10	3.91	.49		
20*	.00	.42		0.25	20	2.30	.52		0.2
30	2.84	.56		0.4	30	1.68	.54		0.5
55*	2.75	.61		0.4	50	0.82	.54		0.9
					75	0.92	.71		
* 10°					100	0.70	.82		1.1
					145	1.42	34.02		
Station position- 66°50'N, 54°42'W, Depth-- 48 m., Date-- 24 July, 1954					Station position- 66°40'N, 56°57'W, Depth-- 550 m., Date-- 25 July, 1954				
m.	t°	S°/oo	O <sub>2</sub> %	P	m.	t°	S°/oo	O <sub>2</sub> %	P
0	3.47	33.28		0.1	0	4.45	33.35		0.1
10	.39	.29			10	.45	.34		
20	.38	.30		0.2					
30	.30	.33		0.2	20	3.64	.37		0.1
45	.33	.34		0.2	30	2.80	.47		0.1
Station position- 66°46'N, 55°36'W, Depth-- 110 m., Date-- 24 July 1954					50	1.91	.55		0.25
m.	t°	S°/oo	O <sub>2</sub> %	P	75	.18	.68		
0	3.46	33.35		0.1	100	0.60	.72		0.8
10	.46	.30			150	1.15	.94		
20	2.87	.43		0.3	200	1.80	34.21		
30	.40	.59		0.5	300	2.88	.50		
50	.27	.65		0.7	400	3.42	.64		
75	.03	.67			535	3.52	.82		
105	1.82	.70		0.7					
Station position- 66°43'N, 56°07'W, Depth-- 170 m., Date-- 24 July 1954									
m.	t°	S°/oo	O <sub>2</sub> %	P					
0	3.8								
10	3.8								
20	3.5								
30	3.0								
50	2.0								
75	1.1								
100	0.9								
139	0.7								

Section V - Off Hare Island - July 30th

Station position- 70°35'N, 55°19'W, Depth-- 230 m., Date-- 30 July, 1954					Station position- 70°39'N, 55°47'W, Depth-- 340 m., Date-- 30 July, 1954				
m.	t°	S°/oo	O <sub>2</sub> %	P	m.	t°	S°/oo	O <sub>2</sub> %	P
0	5.34	33.45		0.1	0	5.21	33.25		0.1
10	3.80	.49			10	3.52	.40		
20	.33	.61		0.1	20	.45	.46		0.1
30	.15	.68		0.2	30	2.43	.59		0.2
50	0.06	.71		0.3	50	-1.35	.83		1.2
75	-1.35	.80			75	-1.53	.83		
100	-0.88	.88		1.3	100	-1.31	.87		1.3
150	1.89	34.28			150	0.64	34.09		
220	2.20	34.42			200	1.58	.31		
					330	2.46	.52		

Section V (cont'd)

Station position- 70°45'N, 56°26'W,  
Depth--560 m., Date--30 July, 1954

m.	t°	S°/oo	O <sub>2</sub> °/°	P	m.	t°	S°/oo	O <sub>2</sub> °/°	P
0	5.93	33.38		0.2	0	6.02	33.15		0.15
10	4.44	.48			10	2.10	.64		
20	2.67	.55		0.2	20	1.88	.69		0.3
30	0.86	.62		0.2	30	.44	.73		0.7
50	-0.46	.76		0.7	50	.03	.81		0.8
75	-1.18	.80			75	0.39	.87		
100	-1.52	.84		1.1	100	0.45	.90		1.1
150	-0.18	34.00			150	0.17	34.04		
195	1.22	.24			200	1.38	.29		
295	2.40	.52			290	2.60	.54		
395	2.24	.53			390	.40	.55		
531	1.72	.58			514	1.68	.58		

Station position- 70°49'N, 56°42'W,  
Depth--560 m., Date--30 July, 1954

m.	t°	S°/oo	O <sub>2</sub> °/°	P
0	6.79	33.17		0.15
10	4.52	.17		
20	3.69	.25		0.25
30	1.93	.26		0.7
50	.11	.49		0.8
75	0.39	.65		
100	0.08	.82		1.2
150	-0.19	.91		
195	0.28	34.04		
330	1.98	34.46		

Section (a) - Off Egedesminde

Station position- 68°06'N, 56°45'W,  
Depth--140 m., Date--25 July, 1954

m.	t°	S°/oo	O <sub>2</sub> °/°	P	m.	t°	S°/oo	O <sub>2</sub> °/°	P
0	3.30	33.18		0.1	0	3.04	33.80		0.2
10	3.58	.34			10	2.83	.80		
20	2.25	.48		0.2	20	.47	.80		0.2
30	0.84	.58		0.3	30	.37	.80		0.3
50	0.23	.78		0.5	55	.23	.81		0.3
75	0.27	.92							
100	0.44	.98							
130	0.48	34.05		1.2					

Station position- 68°00'N, 54°30'W,  
Depth--62 m., Date--25 July, 1954

m.	t°	S°/oo	O <sub>2</sub> °/°	P
0	3.30	33.59		0.25
10	.28	.66		
20	2.84	.79		0.25
30	.77	.81		0.25
60	.58	.81		0.3

Station position- 68°04'N, 56°00'W,  
Depth--108 m., Date--25 July, 1954

m.	t°	S°/oo	O <sub>2</sub> °/°	P
0	4.04	33.56		0.1
10	3.99	.57		
20	.91	.57		0.1
30	2.60	.77		0.2
50	1.68	.81		0.3
75	1.13	.86		
100	1.00	.86		0.9

Section (b) - Across Lille Hellefiske Bank - July 22nd-23rd

Station position- 65°06'N, 58°32'W, Depth--500 m., Date--22-23 July 54				Station position- 65°06'N, 55°43'W, (cont'd)			
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	O2°/o
0	3.24	32.19	0.4	804	3.87	34.92	
10	1.14	.38			* 5°	** 10°	*** 15°
20	0.29	.79					
30	-0.71	33.17					
50	-1.23	.57	1.1				
75	-1.64	.69					
100	-1.68	.73	1.3				
150	-1.25	.86					
200	-0.78	.96					
300	0.70	34.28					
400	1.52	.47					
485	1.49	.48					
<u>Station position- 65°06'N, 57°30'W, Depth--690 m., Date--23 July, 1954</u>							
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	O2°/o
0	2.98	31.86	0.5	200	2.40	.37	
10	1.04	32.46		295	4.16	.81	
20	-1.50	33.27		395	.35	.90	
30	-1.64	.34		585	4.02	-	
50	-1.60	.51			* 5°	** 10°	
75	-1.62	.64					
100	-1.67	.71	1.3				
150	-1.40	.83					
200	-0.34	34.02					
300	1.85	.39					
400	4.25	.79					
600	2.34	.65					
672	.66	.71					
<u>Station position- 65°06'N, 56°30'W, Depth--540 m., Date--23 July, 1954</u>							
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	O2°/o
0	4.96	33.32	0.2	100	0.8		
10	.60	.34		111	0.8		
20	2.85	.51					
30*	1.89	.60					
50	0.89	.77	1.0				
75	-0.50	.84					
100	-0.15	.99	1.3				
150	0.85	34.19					
200	1.97	.40					
300	3.95	.72					
400	4.48	.88					
525	3.83	.83					
* 5°							
<u>Station position- 65°06'N, 55°43'W, Depth--820 m., Date--23 July, 1954</u>							
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	P
0	4.14	33.28	0.2	0	5.55	31.56	0.1
10	.03	.29		10	4.50	33.32	
20*	3.20	.30		20	3.67	.37	0.1
30	2.13	.41		30	2.20	.51	0.25
50	0.76	.55		50	0.78	.74	0.9
75	1.11	.71		80	0.70	.73	0.9
100**	0.60	.81	0.5				
150***	1.50	34.09					
200	2.37	.36					
300	4.01	.77					
400	.42	.87					
600	.35	.95					
<u>Station position- 65°06'N, 54°58'W, Depth--610 m., Date--23 July, 1954</u>							
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	P
0	5.04	33.35	0.1				
10	4.50	.34					
20*	.43	.34					
30	3.42	.44					
50	1.29	.61					
75	0.70	.77					
100**	0.96	.91	0.9				
150	1.63	34.17					
200	2.40	.37					
295	4.16	.81					
395	.35	.90					
585	4.02	-					
<u>Station position- 65°06'N, 54°28'W, Depth--130 m., Date--23 July, 1954</u>							
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	P
0	4.2						
10	4.2						
20	4.0						
30	3.3						
50	1.3						
75	0.8						
100	0.8						
111	0.8						
<u>Station position- 65°06'N, 53°59'W, Depth--95 m., Date--23 July, 1954</u>							
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	P
0	4.0						
10	4.0						
20	3.9						
30	2.6						
50	1.8						
75	1.2						
87	1.1						
<u>Station position- 65°06'N, 53°32'W, Depth--85 m., Date--23 July, 1954</u>							
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	P
0	5.55	31.56	0.1				
10	4.50	33.32					
20	3.67	.37					
30	2.20	.51					
50	0.78	.74					
80	0.70	.73					

Section (b) (Cont'd)

Station position- 65°06'N, 53°00'W Depth--200 m., Date--23-24 July 1954				
m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	5.10	33.29		0.1
10	4.45	.30		
20	2.66	.47		0.3
30	2.43	.49		0.4
50*	1.73	.57		0.7
75**	.31	.65		
100*	0.80	.73+		0.9
150	0.64	.78+		
190***	.98	.92		

\* 5° \*\* 10° \*\*\* 10° + titr. 2 g.

Section (c) - Cape Farewell to Hamilton Inlet

Station position- 59°22'N, 43°39'W, Depth--600 m., Date--6 July, 1954					Station position- 59°11'N, 45°02'W, (cont'd)				
m.	t°	S°/oo	O <sub>2</sub> °/o	P	m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	1.01	32.35		0.1	150	4.84	34.98		
10	1.14	.60			200	4.65	.97		
20	2.82	34.05		0.7	295	4.36	.97		
30	3.06	.19		0.7	395	4.09	.94		
50	4.63	.66		0.8	590	3.65	.93		
75	5.77	.97			790	3.62	.95		
100	5.89	.88		1.1	985	3.50	.922		
150	5.40	.97			1180	3.42	.926		
200	4.85	.94			1475	3.29	.942		
300	4.66	.96							
395	4.60	.95							
545	4.56	.95							
Station position- 59°18'N, 44°22'W, Depth--1550 m., Date--7 July, 1954					Station position- 59°07'N, 45°41'W, Depth--2400 m., Date--7 July, 1954				
m.	t°	S°/oo	O <sub>2</sub> °/o	P	m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	3.80	33.50		0.0	0	6.20	34.38		0.3
10	3.71	.46			10	6.34	.62		
20	4.40	34.06		0.4	20	6.32	.69		0.4
30	4.49	.41		0.7	30	6.20	.75		0.4
50	4.48	.77		0.7	50*	6.00	.78		0.7
75	4.52	.81			100	4.98	.96		
100	4.52	.82		1.2	150	4.82	.98		1.3
150	4.69	.86			200	4.63	35.00		
200*	4.72	.89			300	4.36	34.97		
290	4.76	.94			400	3.97	.94		
385	4.68	.94			600	3.45	.91		
600	4.52	.94			800	3.62	.94		
770	4.28	.94			1000	3.54	.919		
960	4.06	.948			1200	3.44	.919		
1150	3.68	.935			1495	3.40	.944		
1441	3.31	.939							
* 5°					* 10°				
Station position- 59°11'N, 45°02'W, Depth--2050 m., Date--7 July, 1954					Station position- 58°56'N, 46°12'W, Depth--2500 m., Date--7 July, 1954				
m.	t°	S°/oo	O <sub>2</sub> °/o	P	m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	6.22	34.43		0.3	0	6.49	34.78	27.33	0.4
10	6.37	.52			10	6.35	.78	.35	
20	6.34	.55		0.3	20	6.20	.76	.35	0.4
30	6.02	.68		0.4	30	6.16	.74	.35	0.6
50	5.33	.92		1.1	50	4.93	.85	.59	1.3
75	4.90	.91			75	4.77	.92	.65	
100	5.06	.97		1.3	100	4.68	.93	.67	1.3
					150	4.46	.93	.70	
					200	4.34	.94	.73	
					300	4.00	.91	.73	

Section (c) (Cont'd)

Station position- 58°56'N, 46°12'W, (cont'd)						Station position- 57°50'N, 49°20'W, Depth--3500 m., Date--8 July, 1954					
m.	t°	S°/oo	d	O <sub>2</sub> °/o	P	m.	t°	S°/oo	O <sub>2</sub> °/o	P	
400	3.90	34.92	27.75			0	7.90	34.41		0.2	
600	3.69	.92	.77	95.7		10	7.23	.45			
800	3.52	.91	.78	90.3		20	6.74	.52		0.2	
1000	3.44	.917	.80	92.3		30	4.60	.58		0.5	
1200	3.44	.922	.80	88.6		50	3.31	.70		1.2	
1470	3.38	.937	.82	87.0		75	3.27	.74			
1960	2.94	.946	.88	86.7		100	3.25	.81		1.3	
2350	2.32	.926	.91	87.1		150	3.20	.81			
						200	3.21	.83			
Station position- 58°38'N, 47°03'W, Depth--2700 m., Date--7 July, 1954						300	3.08	.84			
m.	t°	S°/oo	d	O <sub>2</sub> °/o	P	400	3.26	.88			
0	6.6					600	3.14	.88			
10	6.4					800	3.22	.90			
20	6.2					1000	3.25	.885			
30	6.1					1200	3.22	.883			
50	4.2					1495	3.21	.883			
75	3.9					1790	3.24	.888			
100	3.9					1980	3.38	.921			
142	3.9					2470	3.10	.941			
Station position- 58°20'N, 47°54'W, Depth--3300 m., Date--7 July, 1954						Station position- 57°37'N, 50°00'W, Depth--3800 m., Date--8 July, 1954					
m.	t°	S°/oo	d	O <sub>2</sub> °/o	P	m.	t°	S°/oo	O <sub>2</sub> °/o	P	
0	7.19	34.36		0.1		0	7.7				
10	6.88	.41				10	7.2				
20	5.32	.49		0.3		20	6.8				
30	3.97	.61		1.2		30	5.4				
50	3.57	.67		1.3		50	5.4				
75	3.89	.82				75	3.2				
100	3.64	.81		1.3		100	3.2				
150	3.69	.87				127	3.3				
200*	3.56	.86									
300	3.62	.87									
400	3.52	.88									
600	3.50	.92	90.7								
800	3.29	.91	92.3								
995	3.32	.895	93.6								
1195	3.22	.885	92.4								
1500	3.21	.888	92.1								
2000	3.24	.939	86.9								
2795	3.02	.937	86.3								
3195	1.86	.913	88.0								
* 15*											
Station position- 58°04'N, 48°40'W Depth--3200 m., Date--8 July, 1954						Station position- 57°22'N, 50°40'W, Depth--3600 m., Date--8 July, 1954					
m.	t°	S°/oo	d	O <sub>2</sub> °/o	P	m.	t°	S°/oo	O <sub>2</sub> °/o	P	
0	7.7					0	8.62	34.56		0.2	
10	7.5					10	7.65	.60			
20	7.2					20	7.23	.59		0.2	
30	3.8					30	5.67	.70		0.9	
50	3.4					50	3.90	.74		1.1	
75	3.0					75*	3.34	.75			
100	3.4					100	3.19	.78		1.3	
130	3.3					150	3.09	.81			
						200	3.04	.81			
						300	3.19	.87			
						400	3.26	.88			
Station position- 58°04'N, 48°40'W Depth--3200 m., Date--8 July, 1954											
m.	t°	S°/oo	d	O <sub>2</sub> °/o	P						
0	7.7					600	3.20	.88	93.6		
10	7.5					800	3.25	.88	93.6		
20	7.2					995	3.32	.894	92.3		
30	3.8					1195	3.28	.892	91.3		
50	3.4					1495	3.26	.886	91.7		
75	3.0					1895	3.30	.903	89.5		
100	3.4					2395	3.26	.942	85.8		
130	3.3					2895	2.90	.942	83.2		
						3445	2.01	.912	87.4		
						* 5°					

Section (c) (Cont'd)

Station position- 57°08'N, 51°20'W, Depth--3400 m., Date--8 July, 1954				Station position- 56°19'N, 53°31'W, (cont'd)			
m.	t°	S°/oo	O <sub>2</sub> °/o	m.	t°	S°/oo	O <sub>2</sub> °/o
0	8.4			2000	3.36	34.933	88.8
10	7.9			2500	3.02	.941	85.8
20	7.5			3050	2.43	.926	86.7
30	5.7						
50	4.0						
75	3.7						
100	3.5						
139	3.4						
Station position- 56°52'N, 52°00'W, Depth--3500 m., Date--8 July, 1954				Station position- 56°03'N, 54°14'W, Depth--3000 m., Date--9 July, 1954			
m.	t°	S°/oo	O <sub>2</sub> °/o	m.	t°	S°/oo	O <sub>2</sub> °/o
0	9.50	34.54	0.3	20	5.6		
10	8.25	.56		30	1.7		
20	7.46	.54	0.4	50	1.9		
30	6.00	.60		75	2.4		
50	4.62	.75	0.9	100	3.2		
75	3.78	.76		143	3.3		
100	3.61	.78	1.3				
150	3.35	.80					
200	3.18	.81					
300	3.16	.85					
400	3.27	.88					
600	3.20	.88					
800	3.24	.89					
995	3.18	.874					
1195	3.16	.870					
1495	3.14	.870					
1995	3.35	.908					
2195	3.38	.930					
2495	3.18	.939					
Station position- 56°35'N, 52°45'W, Depth--3500 m., Date--9 July, 1954				Station position- 55°47'N, 54°54'W, Depth--1700 m., Date--9 July, 1954			
m.	t°	S°/oo	O <sub>2</sub> °/o	m.	t°	S°/oo	O <sub>2</sub> °/o
0	7.08	33.75		0	6.9		
10	6.32	.83		10	6.5		
20	5.27	34.12		20	5.8		
30	3.97	.29		30	4.6		
50	3.89	.55		50	2.5		
75	3.30	.71		75	3.1		
100	3.50	.77		100	3.5		
150	3.54	.81		150	3.5		
200*	3.44	.83		200*	3.44		
305	3.44	.85		305	3.44		
400	3.43	.88		400	3.43		
600	3.46	.90		600	3.46		
800	3.40	.90		800	3.40		
1000	3.30	.899		1000	3.30		
1200	3.27	.900	* 10°	1200	3.27		
1496	3.32	.928					
Station position- 56°19'N, 53°31'W, Depth--3200 m., Date--9 July, 1954				Station position- 55°18'N, 56°13'W, Depth--290 m., Date--9 July, 1954			
m.	t°	S°/oo	O <sub>2</sub> °/o	m.	t°	S°/oo	O <sub>2</sub> °/o
0	8.39	34.37	0.0	0	3.62	28.89	
10	7.27	.41		10	-1.38	32.79	
20	6.50	.48	0.4	20	-1.58	.84	
30	5.00	.68	1.0	30	-1.68	.86	
50	4.43	.73	1.0	50	-1.63	.96	
75	3.54	.77		75	-1.50	33.16	
100	3.32	.78	1.3	100	-1.39	.32	
150	3.31	.81		150	-1.22	.55	
200	3.23	.86		200	-1.08	.78	
300	3.08	.86		270	0.68	34.21	
395	3.08	.87					
595	3.21	.89	91.5				
790	3.18	.91	94.8				
990	3.16	.874	91.4				
1185	3.14	.872	92.0				
1482	3.18	.881	92.6				
1800	3.27	.897	90.2				

Section (d) - Cape Farewell to the English Channel - Aug. 22nd-30th

Station position- 59°30'N, 43°27'W,  
Depth-- 285 m., Date-- 22 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	4.71	33.54		0.3
10	.48	34.08		
20	3.72	.12		0.8
30	4.64	.32		0.8
50	6.65	.72		0.8
75	4.26	.62		
100	.20	.69		1.3
150	.49	.75		
200	.82	.85		
270	.94	.89		

Station position- 58°45'N, 42°14'W,  
(cont'd)

m.	t°	S°/oo	O <sub>2</sub> °/o	P
150	5.79	35.04		
200	.34	.03		
295	4.83	34.99		
395	.61	.98		
595	4.14	.95		
790	3.84	.94		
985	.62	.93		
1185	.52	.93		
1480	.42	.93		

\* 15°

Station position- 59°15'N, 43°02'W,  
Depth-- 1440 m., Date-- 22 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	9.20	34.87		0.25
10	9.19	34.88		
20	.10	.92		0.3
30	.03	.93		0.3
50	8.14	.99		0.9
75	7.23	35.07		
100	6.67	.08		1.3
150	.18	.08		
200	5.89	.07		
300	.10	.02		
400	4.66	34.98		
595	4.06	.96		
795	3.76	.95		
995	.61	.92		
1195	.49	.93		
1492	3.30	34.94		

Station position- 58°30'N, 41°51'W,  
Depth-- 2950 m., Date-- 22 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	10.18	34.65		0.25
20	9.45	.80		0.3
30	7.73	.78		0.8
50	5.51	.863		1.2
75	.19	35.00		
100	4.81	34.97		1.3
150	.42	.96		
200*	3.44	.83		
300	.57	.86		
400	.46	.86		
600	.49	.88		
795	.40	.88		
995	.40	.91		
1195	.31	.91		
1492	.26	.93		

Station position- 59°00'N, 42°38'W,  
Depth-- 1950 m., Date-- 22 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	9.63	34.87		0.3
20	.33	.90		0.3
30	8.88	.94		0.7
50	7.50	35.00		0.9
75	6.39	.02		
100*	.03	.03		1.3
150	5.10	.00		
200	4.88	34.96		
300	.58	.96		
400	.28	.96		
600	3.86	.96		
800	.60	.94		
1000	.50	.91		
1200	.40	.92		
1500	2.98	.91		
10	9.49	-		

Station position- 58°00'N, 41°03'W,  
Depth-- 3200 m., Date-- 23 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	10.29	34.67		0.3
10	.25	.65		
20	.01	.65		0.3
30	9.56	.69		0.5
50	5.18	.78		1.3
75	4.28	.82		
100	.16	.82		1.4
150	3.99	.88		
200	.88	.89		
295	3.56	.88		
395	.50	.86		
590	3.37	.88		
785	.42	.89		
985	.36	.90		
1180	.32	.90		
1475	.30	.90		
40	6.23	-		

\* 5°

Station position- 58°45'N, 42°14'W  
Depth-- 2500 m., Date-- 22 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	9.50	34.95		0.4
10	.39	.95		
20	.20	.96		0.4
30	8.76	.96		0.8
50	7.49	.99		1.0
75	6.62	35.05		
100	.18	.05		1.3

Station position- 57°00'N, 39°29'W,  
Depth-- 3300 m., Date-- 23 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/o	P
0	10.45	34.76		0.5
20	10.42	.78		0.5
30	.27	.78		0.7
50	6.10	.86		1.2
75*	5.24	.88		
100**	4.87	.87		

## Section (d) (Cont'd)

Station position- 57°00'N, 39°29'W, (cont'd)				Station position- 54°00'N, 35°07'W, Depth--1480 m., Date--24 Aug. 1954					
m.	t°	S°/oo	O2%*	P	m.	t°	S°/oo	O2%*	P
150*	4.35	34.86			0	11.88	34.76		
200**	.32	.86			10	.60	.73		0.25
295	.01	.88			20	9.04	.87		
390	3.92	.91			30**	8.43	.88		0.9
585	3.44	.86			50**	7.43	.88		0.9
780	.41	.86			75***	6.76	.88		1.1
980	.40	.88			100*	.29	.88		
1175	.38	.88			150**	.11	.92		
1465	.33	.88			200**	.07	.93		
* 5°	** 10°				300	.11	.98		
					390	5.73	.98		
Station position- 56°00'N, 37°59'W, Depth--2850 m., Date--23 Aug. 1954					590	4.92	.98		
m.	t°	S°/oo	O2%*	P	785	.14	.94		
0	11.78	34.74			980	3.82	.94		
10	.77	.78			1180	.64	.92		
20	.74	.78			1400	3.52	.94		
30	10.33	.78							
50	6.79	.86							
75	.31	.87							
100	5.98	.88							
150	.91	.88							
200	.87	.94							
300*	.47	.92							
400	.20	.96							
595	4.30	.92							
795	3.80	.91							
990	.63	.91							
1190	.48	.90							
1486	.44	-							
* 30°									
Station position- 55°34'N, 37°25'W, Depth--2100 m., Date--23 Aug. 1954									
m.	t°	S°/oo	O2%*	P					
0	11.8								
10	11.8								
20	11.8								
30	11.8								
50	8.9								
75	6.8								
100	5.8								
142	5.4								
Station position- 55°00'N, 36°32'W Depth--2500 m., Date--24 Aug. 1954									
m.	t°	S°/oo	O2%*	P					
0	12.00	34.68							
10	11.85	.72							
30*	11.53	.74							
50	7.11	.78							
85	5.89	.83							
100	.70	.84							
150	.73	.92							
200	.73	.94							
300	.39	.95							
400	.07	.95							
600	4.25	.95							
800	3.92	.94							
1000	.72	.94							
* 5°									

Section (d) (Cont'd)

Station position- 51°00'N, 31°00'W,  
Depth--2150 m., Date--25/26 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/oo	P	m.	t°	S°/oo	O <sub>2</sub> °/oo	P
0	15.13	35.24		0.1	0	14.48	35.22		0.1
20	.12	.24		0.1	10	.48			
30	.10	.24		0.1	20*	.48	.23		0.1
50*	14.00	.40		0.3	30	.48	.23		0.1
75*	12.39	.44			50	.43	.23		0.2
100	11.83	.44		0.9	75	12.22	.31		
150*	.31	.43			100	11.59	.37		1.1
200*	10.98	.43			150	.03	.34		
300	.78	.40			200	10.74	.36		
400	.44	.35			300	9.99	.27		
600	7.26	34.97			400	.26	.20		
800	5.30	.96			600	6.34	34.96		
1000	4.46	.96			800	5.22	35.01		
* 5°	+ 0°				1000	4.34	34.96		
					1200	3.96	.93		
					1496	.64	.92		

Station position- 51°00'N, 29°30'W,  
Depth--1850 m., Date--26 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/oo	P
0	14.9			
10	14.9			
20	14.9			
30	14.8			
50	13.1			
75	12.0			
100	11.8			
139	11.2			

\* 5°

Station position- 51°00'N, 22°00'W,  
Depth--3500 m., Date--27 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/oo	P
0	15.04	35.30		0.1
10	14.90	.28		
20	.84	.27		0.2
30	.81	.28		0.2
50	.43	.26		0.2
75	12.82	.44		
100	.59	.63		0.7
150	11.64	.52		
200	.19			
300	10.37	.32		
395	9.24	.17		
595	5.84	34.96		
790	.50	35.02		
940	4.52	34.97		
1190	.04	.94		
1485	3.71	.93		

Station position- 51°00'N, 28°00'W,  
Depth--2900 m., Date--26 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/oo	P
0	14.7			
10	14.7			
20	14.7			
30	14.6			
50	13.5			
75	12.3			
100	12.2			
145	11.0			

Station position- 51°00'N, 26°00'W  
Depth--3300 m., Date--26 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/oo	P
0	15.86	35.50		0.1
10	.95	.50		
20	.94	.50		0.1
30*	.90	.50		0.1
50	13.13	.42		0.4
75**	12.20	.44		
100	.20	.52		0.9
150***	11.68	.53		
200	.03	.44		
290	10.35	.35		
385	9.54	.26		
580	7.08	.14		
770	5.63	.08		
965	4.43	34.97		

\* 5°    \*\* 20°    \*\*\* 10°

Station position- 51°00'N, 20°00'W,  
Depth--3600 m., Date--28 Aug. 1954

m.	t°	S°/oo	O <sub>2</sub> °/oo	P
0	15.41	35.61		0.1
20	.41	.58		0.1
30	.41	.57		0.15
50	14.90	.61		0.2
75	13.05	.70		
100*	12.70	.70		
150**	.03	.61		0.8
190***	11.79	.57		
265	.46	.53		
350	10.82			
525	9.71	.35		
700	7.89	.17		
880	.76	.34		
1055	5.83	.16		
1320	4.32	34.98		

\* 5°    \*\* 10°    \*\*\* 20°

Section (d) (Cont'd)

Station position- 51°00'N, 18°00'W, Depth--3100 m., Date--28 Aug. 1954				Station position- 51°00'N, 14°00'W, Depth--1520 m., Date--29 Aug. 1954			
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	O2°/o
0	15.33	35.55	0.0	0	15.0		
10	.30	.55		10	15.0		
20	.30	.56	0.1	20	15.0		
30	.28	.56	0.1	30	14.8		
50	14.88	.54	0.1	50	12.5		
75*	12.82	.62		75	11.3		
100	.14	.62	0.9	100	11.2		
150	11.61	.57		142	11.0		
200	.24	.50					
295	10.87	.46					
395	.70	.45					
590	9.95	.38					
790	8.30	.30					
985	6.93	.28					
* 15-20°							
Station position- 51°00'N, 16°00'W, Depth--2900 m., Date--29 Aug. 1954				Station position- 51°00'N, 12°30'W, Depth--2100 m., Date--29 Aug. 1954			
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	O2°/o
0	15.37	35.57	0.1	0	15.10	35.47	0.0
20	.35	.58	0.1	20	.08	.49	0.1
30	.32	.57	0.1	30	14.60	.50	0.1
50	12.73	.64	0.9	50	.52	.50	0.1
75	.20	.63					
100	.07	.63	0.9				
150*	11.73	.57					
200	.44	.53					
300	.24	.52					
395	10.96	.50					
595	.48	.44					
790	9.09	.35					
990	7.64	.29					
* 10°							
Station position- 51°00'N, 11°10'W, Depth--207 m., Date--30 Aug. 1954				Station position- 51°00'N, 57°27'W, Depth--225 m., Date--31 July, 1954			
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	O2°/o
0	15.08	35.45		0	15.08	35.45	0.0
20	15.06	.45		20	15.06	.45	0.0
30	14.43	.44		30	14.43	.44	0.1
50*	.07	.45		50*	.07	.45	0.2
75	12.10	.54		75	12.10	.54	
100	11.25	.52		100	11.25	.52	0.9
150	10.91	-		150	10.91	-	
190	10.80	-		190	10.80	-	

\* 10°

Section off Diskofjord - July 31st

Station position- 69°29'N, 58°22'W, Depth--280 m., Date--31 July, 1954				Station position- 69°29'N, 57°27'W, Depth--225 m., Date--31 July, 1954			
m.	t°	S°/oo	O2°/o	m.	t°	S°/oo	O2°/o
0	4.31	33.46	0.2	0	4.9		
10	.11	.50		10	4.3		
20	3.08	.58	0.2	20	3.7		
30	1.30	.67	0.2	30	2.5		
50	-0.90	.81	1.0	50	0.0		
75	-0.75	.91		75	-0.2		
100	0.23	34.04	1.3	100	0.6		
150	1.50	.22		139	2.0		
200	2.23	.39					
270	2.48	.46					

Section off Diskofjord (Cont'd)

Station position-69°29'N, 56°33'W, Depth--220 m., Date--31 July, 1954				Station position- 69°32'N, 55°08'W, Depth--145 m., Date--31 July, 1954			
m.	t°	S°/oo	O <sub>2</sub> °/o	m.	t°	S°/oo	O <sub>2</sub> °/o
0	4.43	33.70	0.1	0	7.95	32.76	0.0
10	3.86	.72		10	4.98	33.42	
20	.37	.72	0.1	20	3.77	.65	0.1
30	1.85	.74	0.2	30	.10	.72	0.2
50	-0.55	.77	0.5	50	0.20	.84	0.7
75	-0.81	.89		75	0.28	.95	
100	0.42	34.03	1.3	100*	0.56	34.04	1.3
150	1.36	.18		135**	0.64	.05	
210	1.80	.25					

Station position- 69°29'N, 55°46'W, Depth--230 m., Date--31 July, 1954	* 5°      ** 15°
m.	t°
0	6.86
10	4.11
20	.11
30	2.97
50	1.26
75	-0.01
100	0.50
150	1.06
220	1.49
	33.38
	0.1

Station position- 69°29'N, 54°25'W, Depth--150 m., Date--31 July, 1954			
m.	t°	S°/oo	O <sub>2</sub> °/o
0	5.80	33.52	0.2
10	4.99	.57	
20	3.84	.65	0.2
30	2.54	.74	0.2
50	1.28	.83	0.9
75	0.75	.90	
100	0.70	.91	
140	0.62	.96	

--oo0oo--

The hydrographic data - temperature, salinity, contents of oxygen and phosphate - given in the preceding tables are shown in graphic form in the following Figures 1 to 12.

In Figures 1, 2 below, 3, 4 and 7, the isotherms of the surface layers, being so close to one another, could not be given separately; the temperatures of the surface (0 m.) are given in figures behind the Stat. Nos.

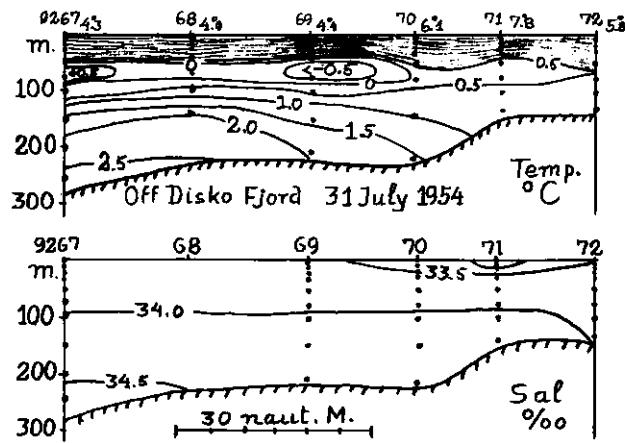
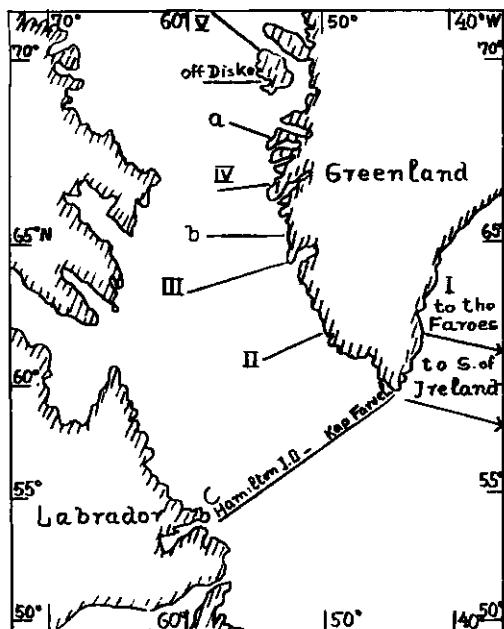


Fig.1. Section of Disko Fjord, 31 July 1954.



A map showing the position of the various sections taken by the R/V "Dana".

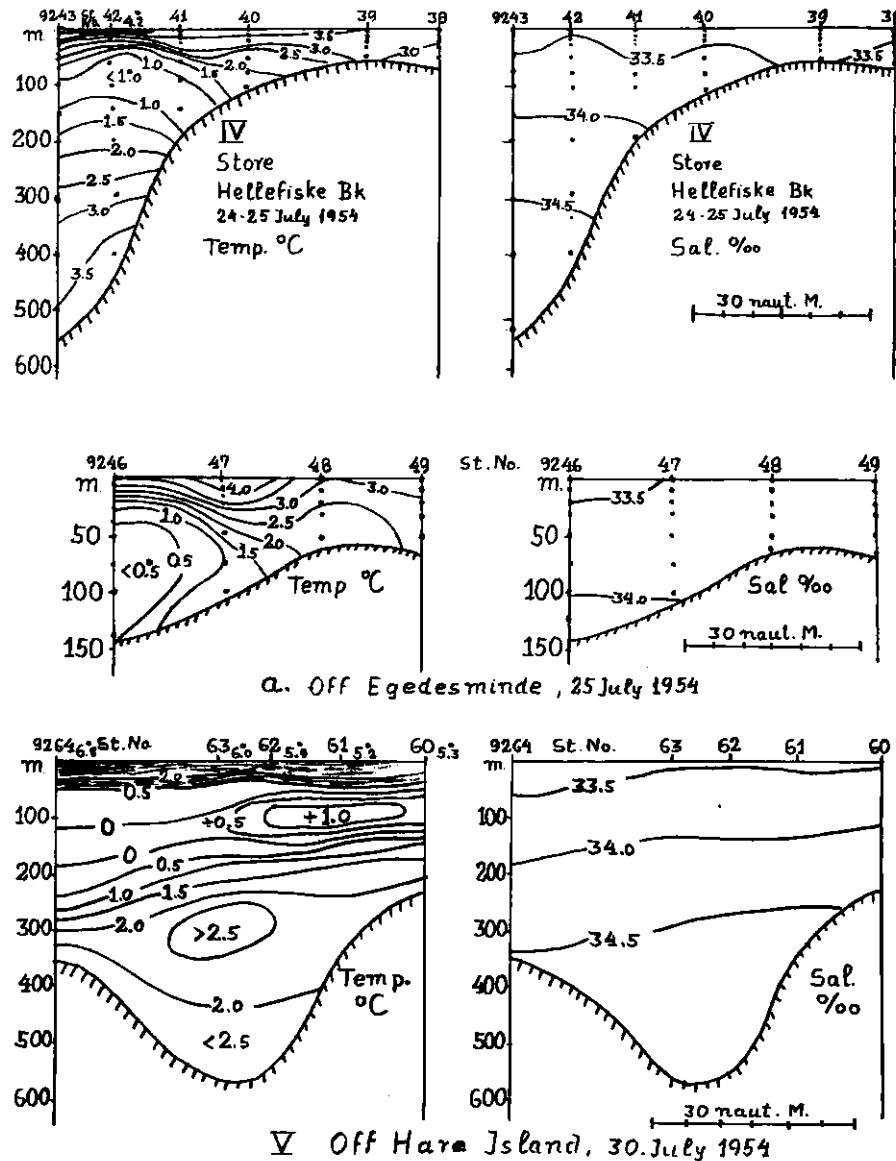


Fig.2. Above. Section IV, off and across Store Hellefiske Banke, 24-25 July 1954.  
Center. Section a, off Egedesminde, 25 July 1954.  
Below. Section V, off Hare Island, 30 July 1954.

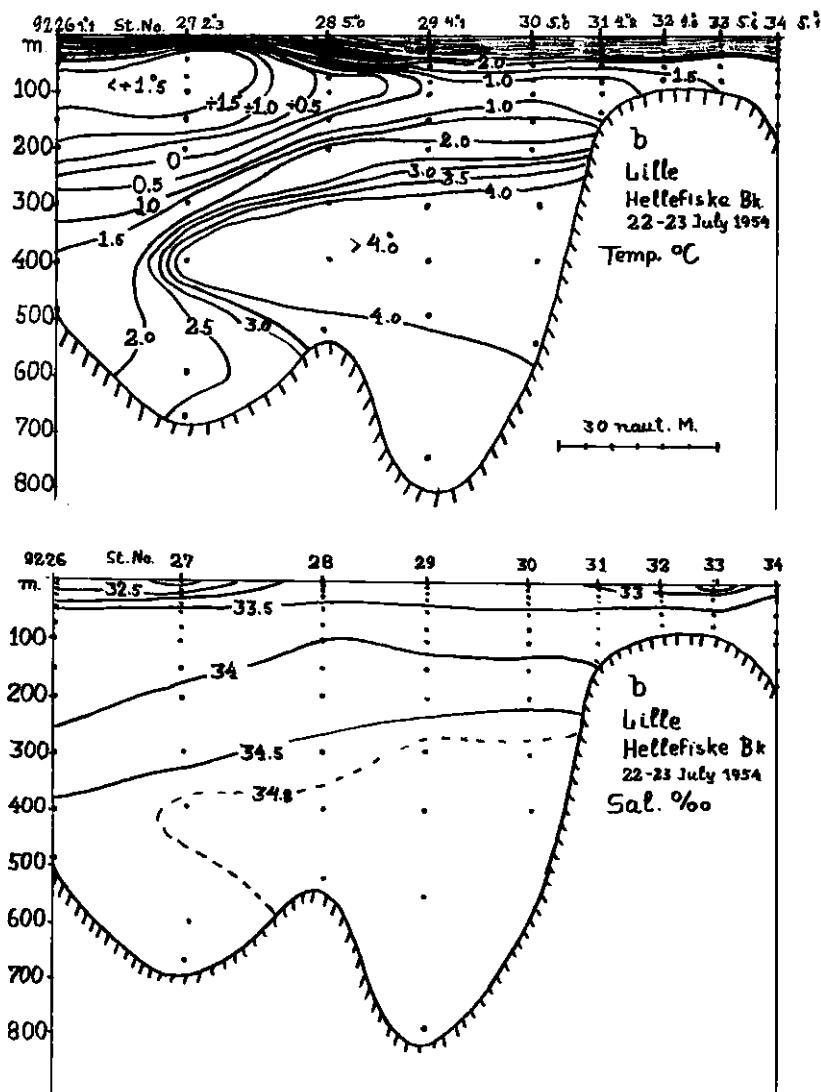


Fig. 3. Section b, off and across Lille Hellefiske Banke, 22-23 July 1954.

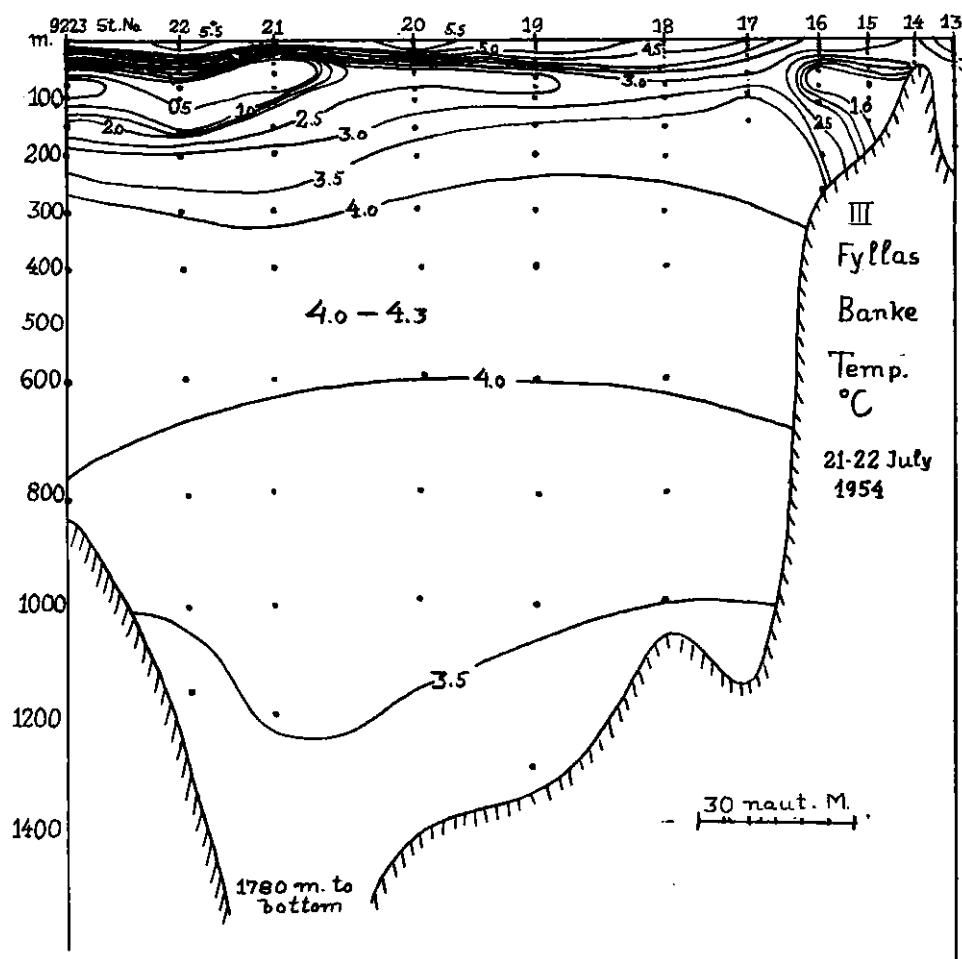


Fig.4. Section III, off and across Fyllas Banke, 21-22 July 1954, Temperature.

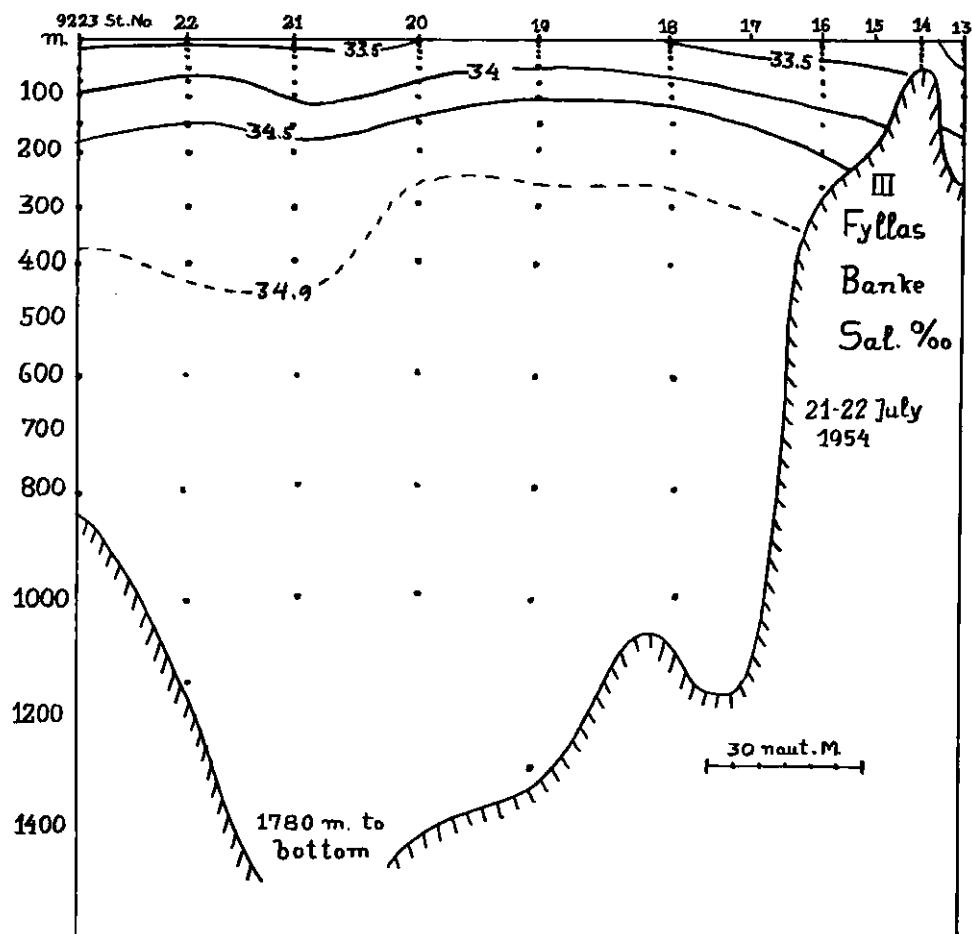


Fig. 5. Section III, off and across Fyllas Banke, 21-22 July 1954, Salinity.

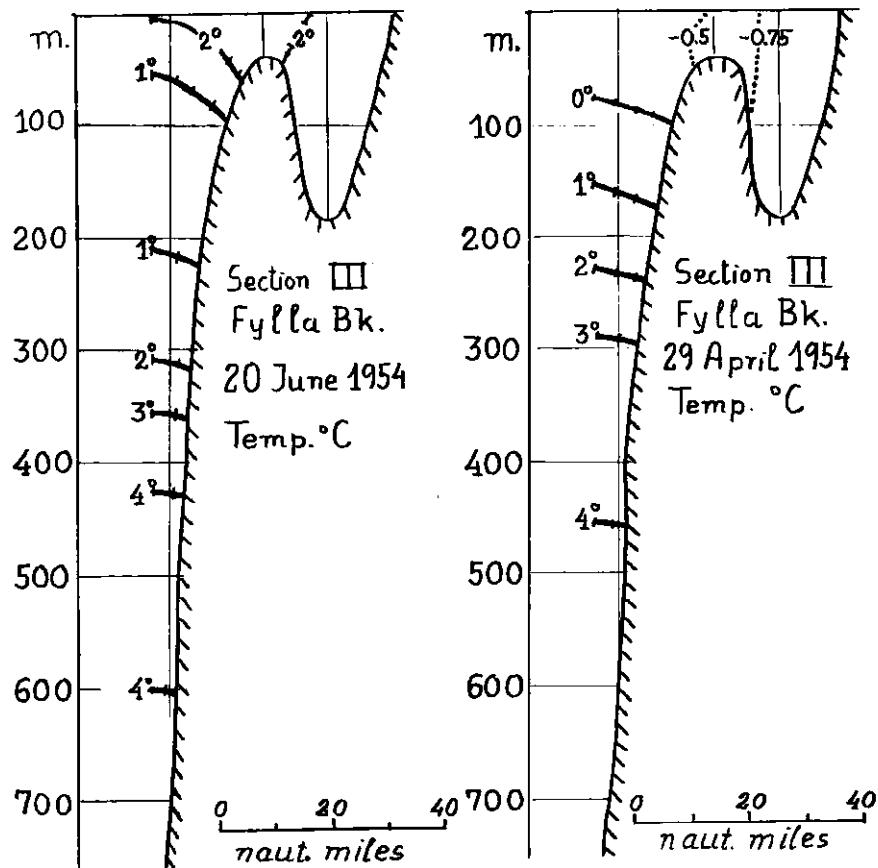


Figure 5 a

Fig. 6. Section II, off Frederikshab, 11-12 July 1954. Figures for  $O_2\%$  are inserted.

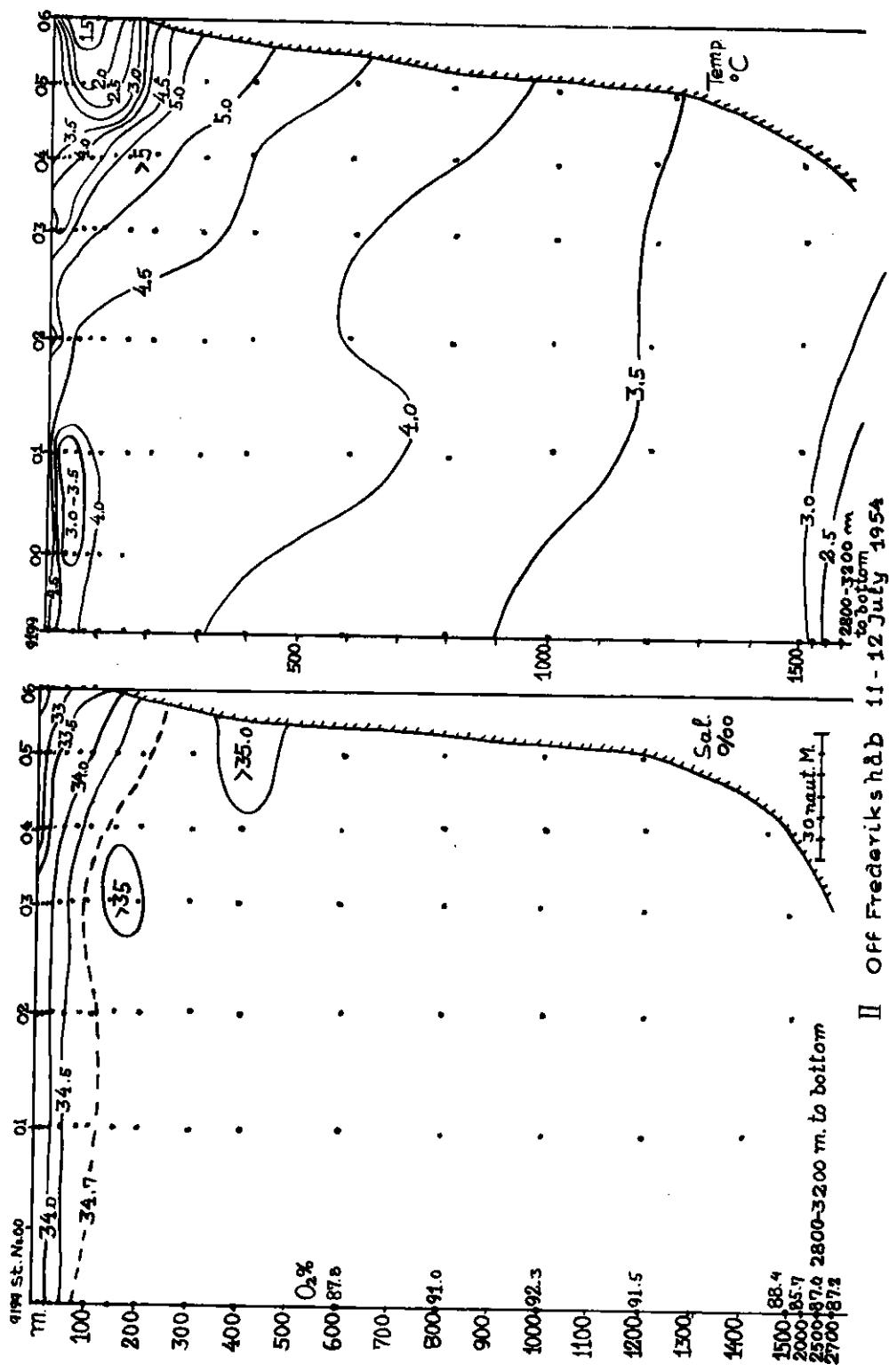
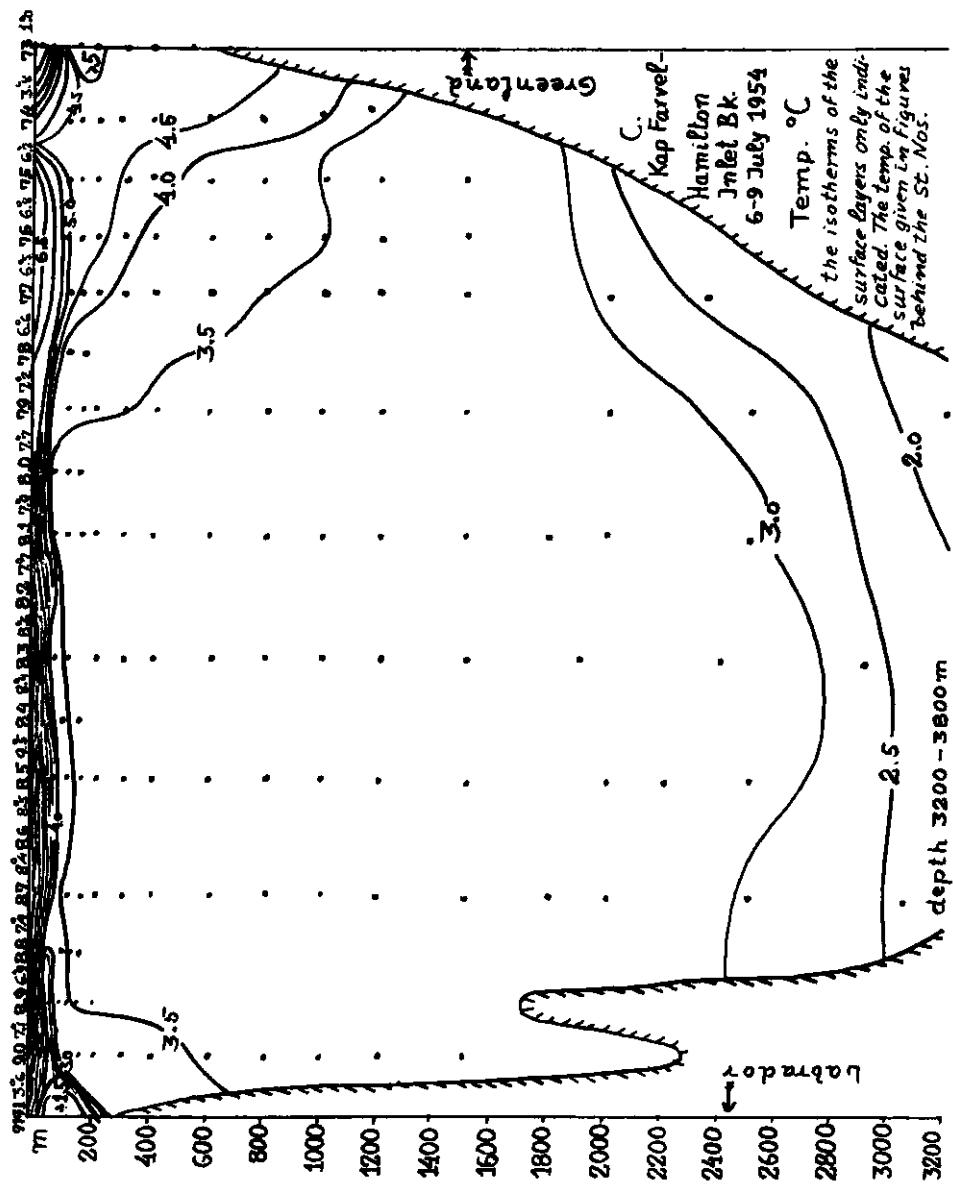


Fig. 7. Section C, Kap Farvel-Hamilton Inlet Bank, 6-9 July 1954. Temperature.



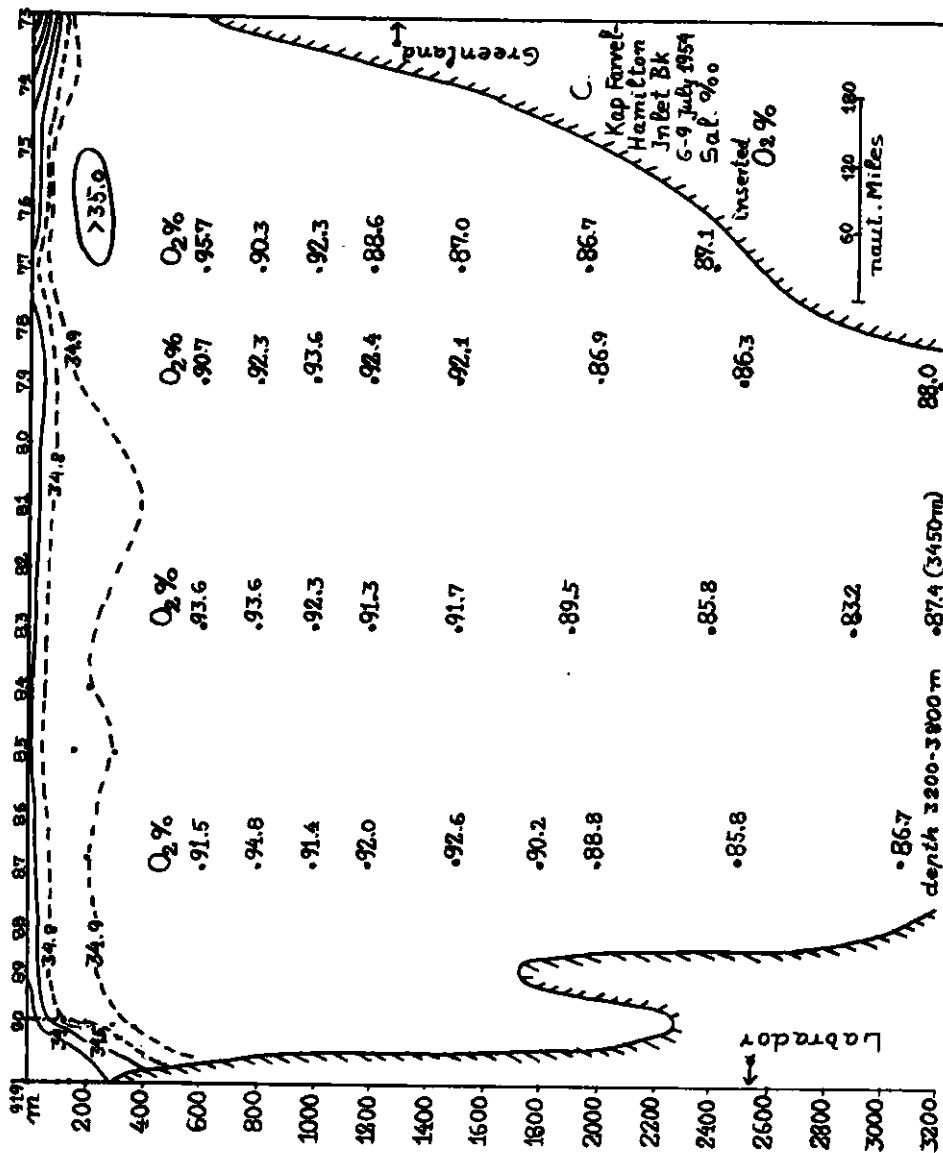
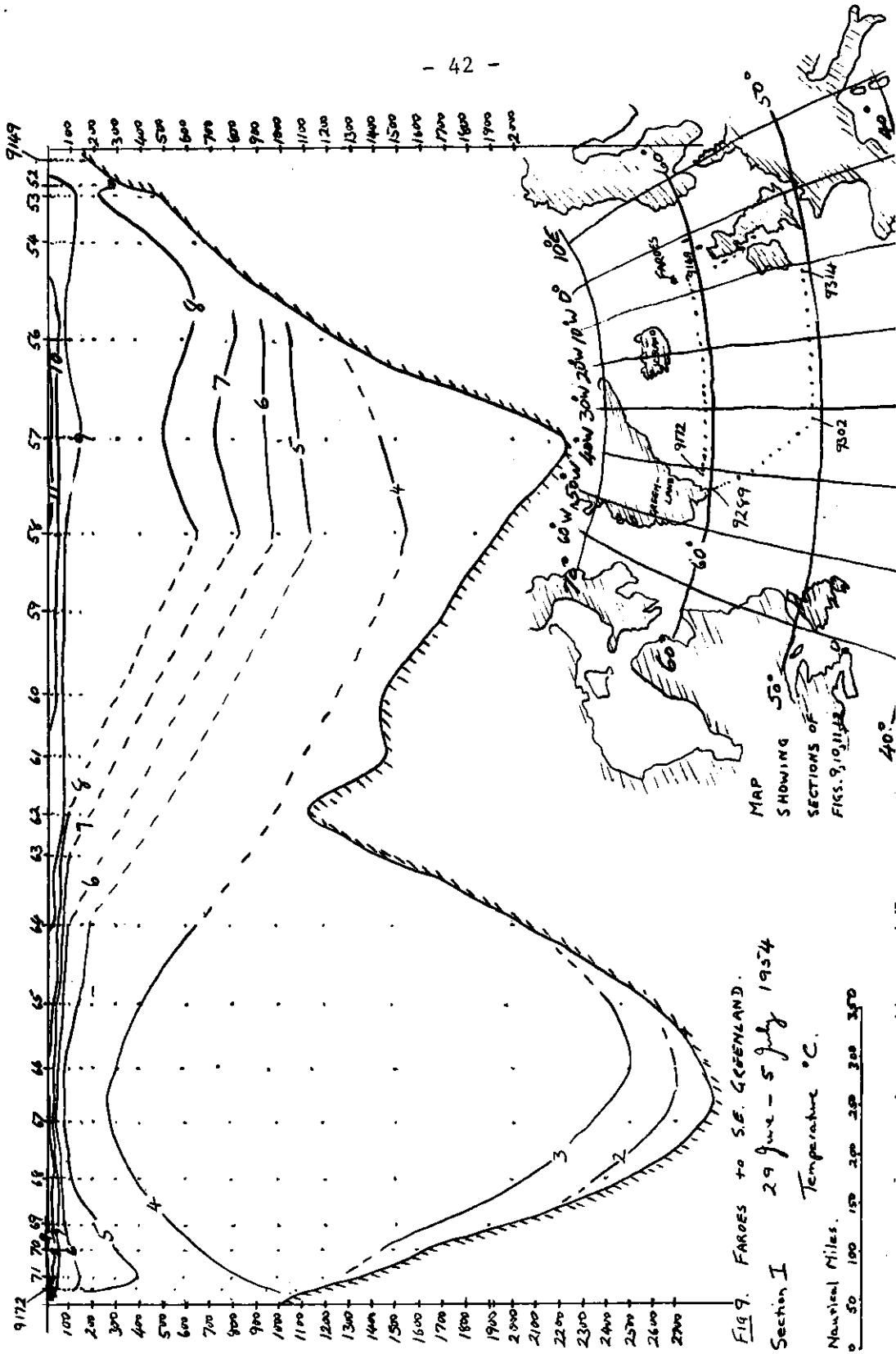
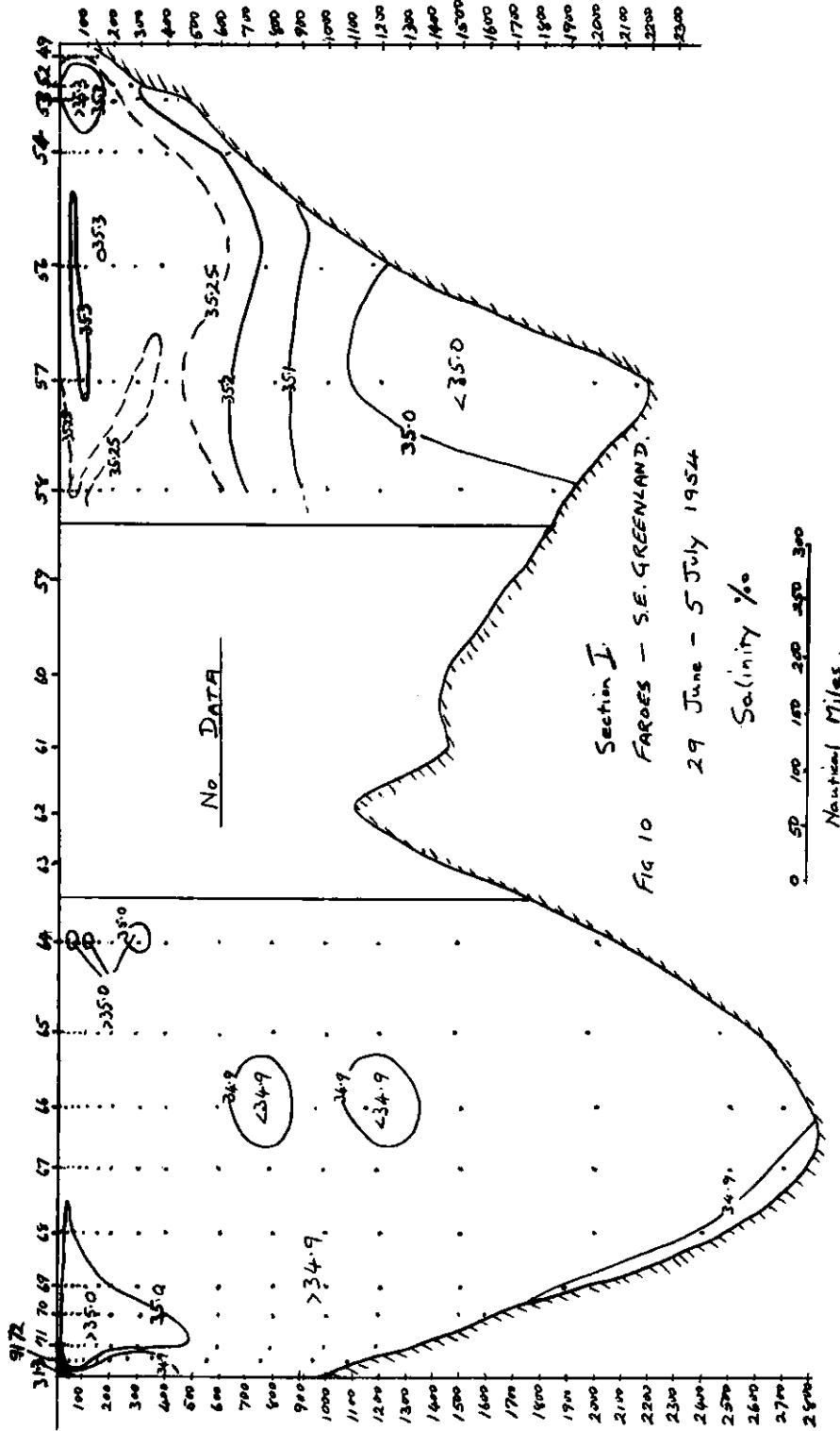
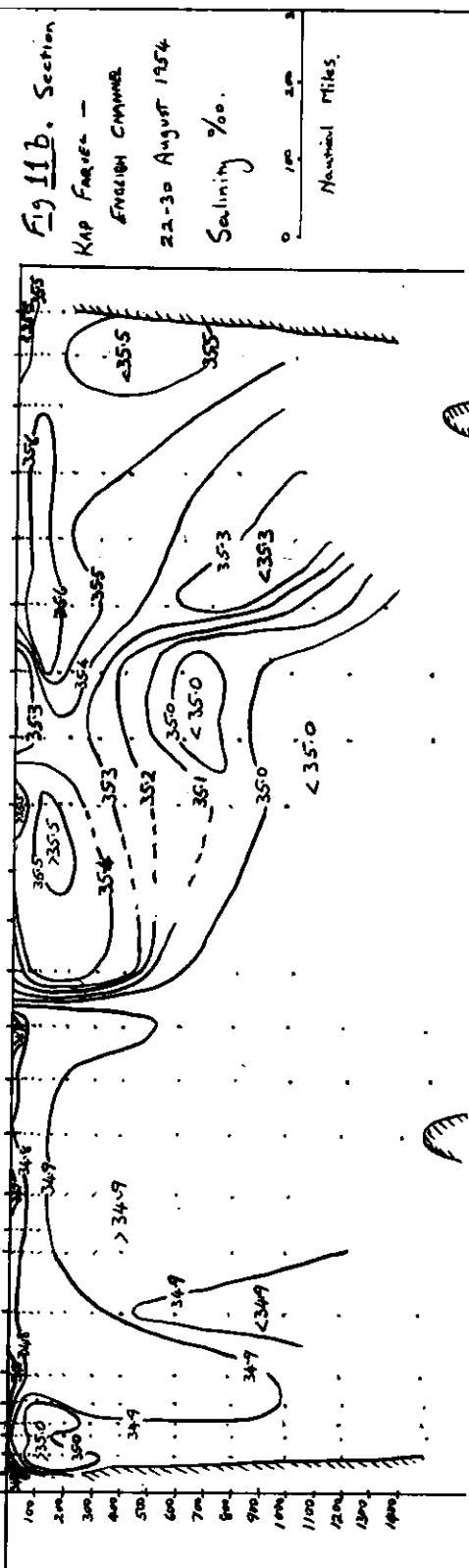
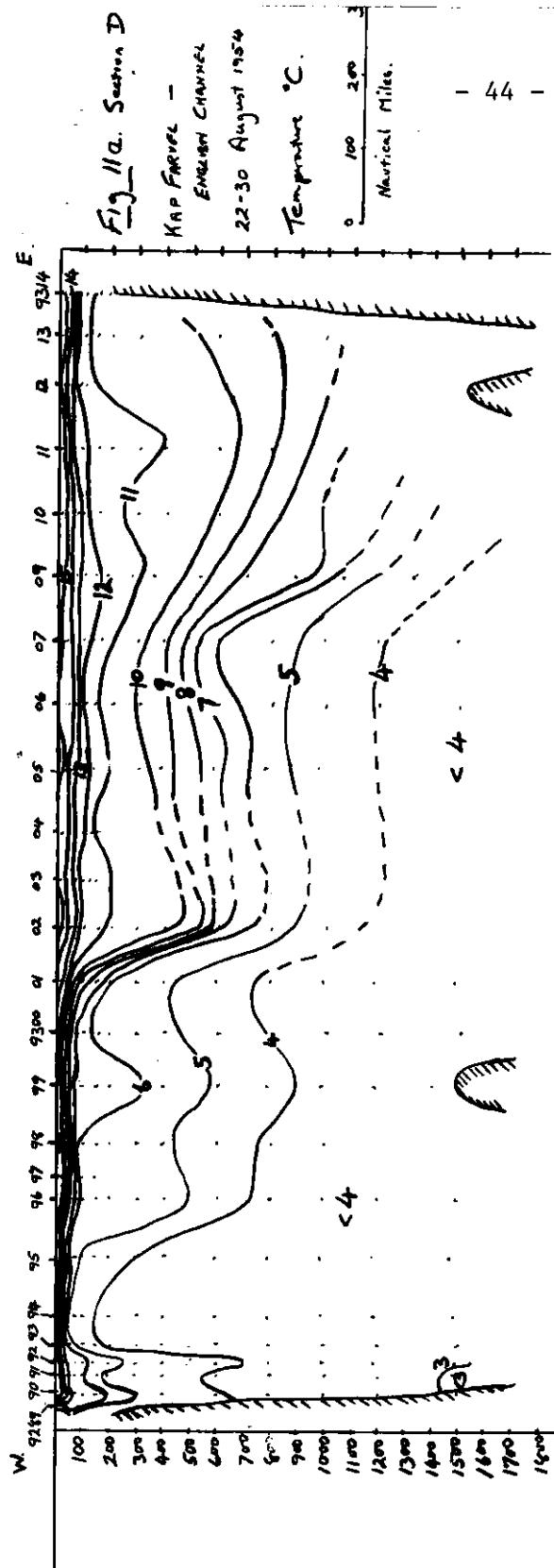


Fig. 8. Section C, Kap-Farvel-Hamilton Inlet Bank, 6-9 July 1954. Salinity. Figures for  $O_2 \%$  are inserted.





E 2



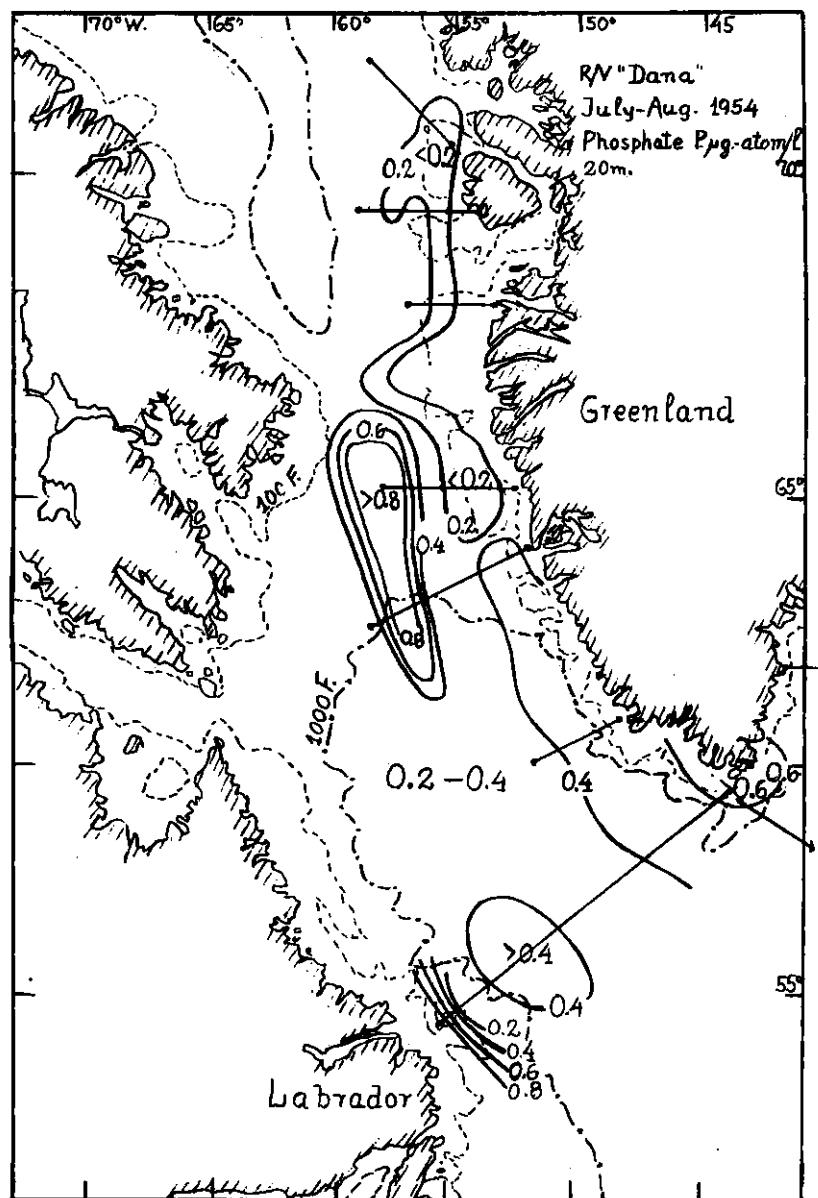


Fig.12. Distribution of Phosphate in Greenland waters  
at 20 m.'s depth. R/S "Dana", Sections,  
July-Aug. 1954.

