## INTERNATIONAL COMMISSION FOR



# THE NORTHWEST ATLANTIC FISHERIES Document No. 28

## ANNUAL MEETING - JUNE 1954

# Statistics on Landings for the Year 1953

At the Third Annual Meeting of the Commission, the following recommendation was passed:

"That, in order to provide the Commission with up-to-date information, each participating Government be urged to report, at least one month before the next Annual Meeting, statistics on its landings of each species from each Subarea, together with such other statistical information as is then available."

The above recommendation was made after it had been considered that because of the increased statistical requirements of the Commission, countries would find it difficult to report all their statistics in time for the Annual Meeting. The necessity of data on landings by species and by subareas was thus stressed as being of primary importance for the Annual Meeting.

More detailed statistics than those contained in this document have been received. However, only landings by species, subareas, methods of fishing and by countries are included in this document together with some of the other information received. Although most countries did not mention it, it seems that the information received includes most of the statistical information available for 1953. From the more detailed data can be inferred that progress was made towards meeting the statistical requirements of the Commission. With the exception of a small quantity, landings are now broken down by subareas, and in almost all cases by subarea subdivisions adopted at the Second Annual Meeting of the Commission or according to those adopted at the Third Annual Meeting in a few cases. The former statistics can be made to conform to the new subarea subdivisions without leaving too much to speculation. Some of the countries have reported data collected on a monthly basis. More detailed statistics on fishing effort are reported by most of the countries. However, important information such as wastage of fish at sea due to their having no commercial value or being not wanted has been omitted by nearly all countries together with information on economic factors having influenced fishing during 1953. This latter kind of information proved its importance in the consideration of reasons explaining the large decrease in cod landed by Canadian fishermen, for example from an area where landings by other countries increased and that from inspection of the data, in proportion to the fishing effort expended.

On the basis of the statistics presented in the following pages, but restricting considerations to cod fishing, the situation is as follows: Canadian landings decreased by a large amount, mainly because of economic factors detrimental to fishing and because of some shifting of fishing effort to other species. The pessimistic expectations on the part of the fishing industry may have also caused curtailment of fishing at a period of the year when cod is usually in greater abundance. West Greenland landings increased slightly while those of the Farcess decreased by a large amount. Lower landings by Farcess fishermen conforms with the smaller fishing effort expended because of market conditions. Statistics from France are now broken down by subgress. However, data for 1953 are not perfectly comparable with those for 1952 which included landings criginating from outside the Convention

Area. Also, when the breakdown of the landings by subareas is considered, it should not be understood that during the past years landings by subareas were somewhat in the same proportion as those by subareas for 1953, because Subarea 4 is not considered as a traditional fishing area for France in the sense that fishing in that subarea was sporadic over the years. Landings by France are considered at about the same level as in 1952 but with a sizeable increase of landings from Subarea 4. Iceland's landings of cod from Subarea 1 were very much lower because of Iceland's new redfish fishery at West Greenland and because of less fishing effort expended.

Italy landed more in 1953 than in 1952 and it is the same for Norway, Portugal and Spain. Portugal's landings from Subarea 4 which were almost nil in the past years, were substantial in 1953 due to increased fishing effort and not to a major displacement of fishing effort from other subareas to Subarea 4. Landings by the United Kingdom decreased in proportion to the less fishing effort expended. Landings by the United States decreased due to a continued disinterest of the markets for cod.

From the above, it seems that 1) for countries showing decreases in landings economic factors appear to be totally responsible, that 2) a total decrease in landings of cod is registered for Subarea 1, and 3) also in Subarea 5 where (in this latter area) only the United States are concerned. Total landings of cod in the other subareas increased even if contrary to an assumption that the landings from France have decreased.

Unless otherwise indicated, the same conversion factors were used as for the 1952 statistics.

Commission Statistician

- THE END -

Total Groundfish Landings by Countries from the Convention Area in 1953

$\overline{}$
fresh
round
tons
metric
S E

Countries			Subarea			Subarea	Total	Total
	1	2	3	÷	5	not Indicated	1953	1952
Canada	ı	11,126.5	233,267.4	161,646.6	76.3	1	406,116.8	463,761.1
Denmark	148,513.0	1	٠	•	1	•	48,513.0	64,835.0
France	19,980.0	19,980.0 27,492.5	22,415.0	22,415.0 43,082.5	•	1	112,970.0	142,647.0
Iceland	26,252.8	J	1	ı	•	ı	26,252,8	48,070.0
Italy	1	1	1	1	i	14,293.0	14,293.0	12,164.0
Norway	32,016.6	i	I		•	1	32,016.6	22,832.0
Portugal	54,502.8	40,264.9	56,142.0	13,204.9	ı	1	164,114.6	134,407.5
Spain	2,981.1	14,852.3	89,524.3	2,914.1	•	ı	110,271.8	102,643.5
United Kingdom	35,039.1	4.018	£60°	1	•	ı	36,409.9	58,581.4
U.S.A.	ı	1	33,652.2	47,956.8	157,544.0	1	239, 153.0	279,564.7
GRAND TOTAL	219,285,4	94,546.6	435,561.3	268,804.9	157,620.3	14,293.0	1,190,111.5 1,329,506.2	1,329,506.2
Total 1952	254,190.4	53,776.7	401,581.8	53,776.7 401,581.8 268,972.5 180,548.5	180,548.5	170,436.3		•

1 2 3 4 5 Indicated 1953  27,552.0  11,085,3 160,668.0 17,378.1 4,4 5 88,318.7 5 88,318.7 5 88,176.1 1 11,104.7 184,683.0 92,526.6 4,4 5 88,318.7 5 88,318.7 1 11,104.7 184,683.0 92,526.6 4,4 5 88,318.7 1 11,085.3 1 112,970.0 1 1 12,970.0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Country			Subarea			Subarea	Total	Total
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Hounding Mrid.   19, 4	Canada								
Continue	Excluding Nfld.		4°6T	24,015.0	75,148.5	<b>ᡮ</b> . ᡮ	ı	99,187,3	
t Greenland 18,624.1	Total	1 1	11,104,3	184,683.0	17,378.1		•	189,131,4	
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g Liners  14.1	nited Kingdom	•	14,690.8	67,109.7	958	ı	1	86,691.8	68,319
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1) 1953 cannot be compared with 1952 as in 1952, part of the landings indicated came for the Convention Area. To the 1953 data should be added 618 metric tons of salted constructions of fresh cod landed at St. Pierre and Miquelon by fishermen of the constructions of the form of the	1952	257,757,9		330,597.5	154,289.7		14,293.0	806,320.0	917,816,8
landings 8,740.0 metric tons came from Subareas 1 and 2 and 5,553.0 metric	1) 1953 side the	unnot be com	pared with ea. To the	is in	1952, part	be lai	<b>~</b>	sted came	from out-
Tanatage 1/10.0 metric tons came from Subareas 1 and 2 and 5,553.0 metric	3,038 metri 2) Of Ital	c tons of fr	resh cod la	it St.	Pierre and	Miquelon	by fisherm	of the	
1000 4 mm 4	came from Suba	ubareas 3 a	3 (°C 1/60 b	tons	came from S	Subareas I	2 and	553.0 me	ţ

Digest of Redfish Statistics for the Convention Area 1953

( In metric tons round fresh )

Country		9	Subarea			Total	Total
	г·I	. IS	m	<b>+</b> .	5	1953	1952
Canada							1
Excluding Nfld.	0	5,9	2,103.7	6,101.0	1	8,210.6	8,210,6 3,597.0
Newfoundland	1	1	10,377.9	2,737.2	ı	13,115.1	14,143.9
Total	•	5.9	12,481.6	8,838.2	ı	21,325.7	17,740.9
Iceland Otter Trawlers	12,406.1	•	t	1	ı	12,406,1	1
Norway Long Liners	1.8	ı	1	ı	1	8. H	i
United Kingdom Otter Trawlers	1,057.0	ı	ı	ı	1	1,057.0	159.6
United States		Þ.	33,113.9	33,113.9 19,573.8 16,791.2	16,791.2	69,478.9	4° †81° †8
GRAND TOTAL	13,464.9	5.9	45,595.5	28,412.0	16,791.2	45,595.5 28,412.0 16,791.2 104,269.5 102,084.5	102,084.9

Digest of Haddock Statistics for the Convention Area 1953

( In metric tons round fresh )

Country			Subarea			Total	Total
	ı	2	3	<b>.</b> ‡	5	1953	1952
Canada Excluding Nfld. Newfoundland Total	1 8 5	r. r.	6,560.2 7,566.6 14,126.8	25,563.7 46.8 25,610.5	0.11.	32,135.4 7,613.4 39,748.8	30,357.0
Iceland Otter Trawlers	<b>ተ</b> .	•	ı	i	•	<b>1</b> *8	
$ ext{Portugal}^1)$ Otter Trawlers	4.0	69.7	147.3	ቲ•9	ı	228.0	545.0
Spain Pair Trawlers Otter Trawlers Total	188.7 48.7	160.0	3,525.2 16,750.1 20,275.3	416.0 416.0	111	3,525.2 17,374.8 20,900.0	3,464.0 29,534.8 32,999.7
United Kingdom Otter Trawlers	403.6	ı	8.0	,	1	411.6	3.1
United States	ı	•	351.8	19,304.3	46,979.3	66,635,4	73,613.3
GRAND TOTAL	465.3	230.2	34,909.2	34,909.2 45,337.2 46,4990.3	46, <del>0</del> 990.3	127,932.2	142,213.8

Note: 1) Preliminary statistics.

CANADA - 1953 (In metric tons round fresh )

a		Subar	ea		Total
Species	2	3	ц	5	10041
c	anada (exc	luding Nfld	.)		_
Cod	19.4	24,015.0	75,148.5	4.4	99,187.3
Haddock	<b>'.</b> 5	6,560.2	25,563.7	11.0	32,135.4
Halibut	-	478.7	2,043.8	-	2,522.5
Redfish	5.9	2,103.7	6,101.0	-	8,210.6
Flounders	9.9	9,390.6	11,300.2	-	20,700.7
Other Groundfish	5.5	. 1,670.0	21,241.8	60.9	22,978.2
Total	.41.2	¥¥,218.2	141,399.0	76.3	185,234.7
	Newfo	undland 1)			
Cod	11,085.3	160,668.0	17,378.1	-	189,131.4
Haddock	-	7,566.6	46.8	-	7,613.4
Halibut	-	152.3	36.6	-	188.9
Redfish	-	10,377.9	2,737.2	-	13,115.1
Flounders	-	10,091.6	48.9	-	10,140.5
Other Groundfish	-	192.8	2)	<b>+</b>	192.8
Total.	11,085.3	189,049.2	20,247.6	-	220,382.1
TOTAL CANADA	11,126.5	233,267.4	161,646.6	76.3	406,116.8

NOTE: 1) Corrections to the basic material were received but are not included here. They refer to negligible quantities of fish. 2) Negligible.

# Factors influencing Landings in Canada (excluding Newfoundland)

### Fishing Effort:

The number of large otter trawlers did not change during 1953 but the number of small otter trawlers (up to 50 gross tons) increased from about 140 to about 200 craft. Fishing effort by dory schooners again decreased because of difficulties in recruiting fishermen for dory fishing. Medium-size long-liners increased in number and some small dory schooners converted to long lining.

## Areas Fished:

Fishing in Subareas 1 and 2 did not develop beyond an occasional exploratory trip during 1953.

All dory-schooner salt fishing was carried out in Subarea 3. Offshore fresh-fishing in Subarea 3 increased with greater landings of haddock and flounders (mainly plaice).

Fishing by large offshore vessels in Subarea 4 was reduced.

# QUANTITIES OF HADDOCK AND COD CAUGHT BUT NOT LANDED Canada (excluding Newfoundland)

In Canadian and United States landings from Subarea 4 all of the redfish, about 70% of the haddock and 25% of the cod are now taken by otter trawlers. Complete information is not yet available on European fishing in Subarea 4 but it is believed that otter trawling is the principal fishing method; the total percentages taken by otter trawlers should accordingly be increased, particularly for cod.

Although otter trawling is the principal fishing method in Subarea 4, it is noted that a large proportion of groundfish landings is taken by line fishing and it is important to consider line fishing as well as otter trawling in any conservation measures.

### Otter trawling:

Eight sea trips were made by observers on commercial otter trawlers in order to estimate quantities of groundfish caught but not landed. The 1953 observations conform with those of earlier years in demonstrating that large numbers of haddock are discarded at sea during summer months. The numbers discarded during February were negligible but more than 50% of those sampled in August were discarded at sea.

The smallest haddock sampled were 18 cm. for standard gear (2%" mesh opening), 33 cm. for the new Yankee No. 41 trawl (4%" mesh opening) and 38 cm. for those landed after culling small unmarketable fish.

### Line fishing:

A number of total catches of cod and haddock were measured at sea on the M.B. "Mallotus," for comparison with samples of commercial landings from the same inshore grounds. The results show that large quantities of cod and haddock are discarded at sea by line fishermen. The minimum sizes taken at sea were 29 cm. for haddock and 31 cm. for cod; the minimum sizes landed commercially were 36 cm. for both.

# Percent scrod in sample

Cod	Haddock
Landings Catches	Landings Catches
January	20 25 . 13
February 28 March 41	37 51
April 19 43	7 41

In March, samples of commercial landings from LaHave Bank by long-liners and dory schooners using similar lines, hooks and bait were compared. It is clear that dory-schooner fishermen discard more small haddock at sea than do those on long-liners, presumably as a result of the greater amount of fish handling involved in dory fishing.

# Percent scrod in shaples of landings of haddock

Long-liners	Dory schooners
11	8
15	9

N.B. In both tables the scrod cull was at 46 cm. for haddock and .49 cm. for cod.

# Factors influencing landings in Newfoundland

## Fishing effort

The local number of otter trawlers was increased by four during 1953, though two of these did not begin operation until the latter part of the year. The number of Danish seiners increased from two to seven, but these were not in constant operation throughout the year.

Fishing by dory schooners from Newfoundland has ceased to exist, with no vessel regularly landing in Newfoundland this year.

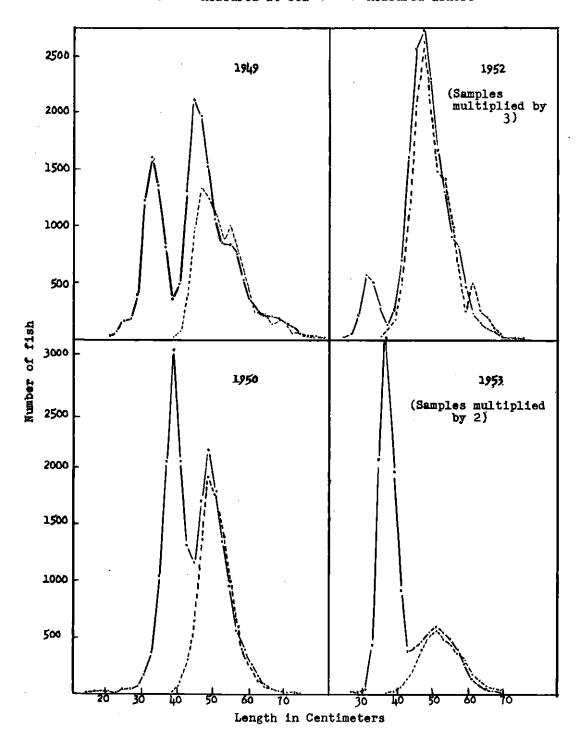
The long-line fishery on inshore grounds is increasing yearly, with several new boats added to the fleet this year. There was, however, a decrease in the number of smaller type inshore boats.

### Areas fished

In Subarea 2 landings are from the Labrador shore fishery which has decreased considerably during the past few years.

In Subarea 3, landings attributed to small shore boats are approximate and were arrived at by subtracting the total catch of other types of fishing vessels from the total landings by all boats. The landings of redfish, plaice and halibut attributed to the shore boats are probably much too high. Two sets of figures are collected by the Department of Fisheries, one for the various offshore vessels and one for total landings. Especially in total landings there may be some errors and the subtraction of these two sets of figures to give shore landings will result in some anomalies. It was not possible this year to collect inshore and offshore landings separately.

# HADDOCK CATCHES & LANDINGS - ST. JOHN'S ---- Measured at sea ---- Measured ashore



### HADDOCK AND PLAICE DISCARDED AT SEA BY NEWFOUNDLAND TRAWLERS

### Haddock

Twice on the Grand Bank and once on St. Pierre Bank during the first four months of 1953, haddock were measured on board commercial trawlers. Measurements were made before any of the haddock were discarded. These were compared with measurements made on the same catches after discharging ashore. In order to estimate percentages discarded in each case shore measurements have been adjusted for direct comparison with at-sea measurements by a ratio based on the assumption that all fish of 50 cm. and over are retained. The accompanying figure shows the relative numbers of haddock caught and retained since 1949.

Comparison with last year's figures shows that a larger proportion of fish below 50 cm. length is being discarded. In 1952, 29% of the fish between 38 and 41 cm. and 20% of those between 42 and 45 cm. were discarded from Grand Bank catches, whereas this year 98% and 46% respectively of fish between those intervals were discarded. Comparison with 1950 however, shows that at that time about the same proportion of fish under 50 cm. was being discarded as this year. In the 38 to 41 cm. range 98% and in the 42 to 45 cm. range 62% were thrown away.

Of the total catch on the two Grand Bank trips this year (Sub-division 3-0) 67% by number were discarded at sea as compared with 18% in 1952, and 52% in 1949. The high proportion thrown away this year is due to the large numbers of small haddock (from 34 to 40 cm.) which are being caught this year for the first time in large numbers, but are not yet large enough for the market.

On the St. Pierre Bank (Subdivision 3-P) trip a similarly large proportion was discarded amounting to 74% of the total catch by number.

The weight of the haddock discarded on all the Grand Bank and St. Pierre Bank trips estimated from length frequency data, was 42% of the weight of the total catch. The captains of the trawlers estimated the weight of haddock retained and discarded on each drag. These estimates gave an average on all trips of 55% by weight of the catch discarded. In 1952 estimates based on length measurements and those from the captain's figures were 9% and 8.7% by weight respectively.

## American Plaice

Large random samples of the American Plaice caught by a commercial trawler during two trips were measured at sea. Later further samples were measured on shore when the catch was being landed. This data is condensed in columns 2 and 3 of the table.

Size <u>Group</u>	Number Measured at Sea	Number/ Measured on Shore	Ratio <u>Sea/Shore</u>	Calculated (Shore x 3,26)	Difference	Percent Discarded at Sea
152-279 -29133579 -233579 -33579 -33579 -33579 -33579 -3579	133 520 171 277 329 583 862 739 499 236 165 137 31 25	0 0 27 16 158 158 262 230 1295 555 33 6 30	04.308 04.308 04.308 04.308 0.3298 1.3018 2.3 0.44.34.558	0 0 7 23 52 134 267 Average 40-51 For purposes o assumed that n size groups we 186 163 179 108 42 20 10 0	f calculation o plaice of	these
4101						

Column 4 shows the ratio of the number measured at sea to the number measured on shore. This ratio is roughly constant (Average 3.26) between 40 cm. and 51 cm. (inclusive) indicating that few plaice of these sizes were discarded. A number can be calculated (column 5), by multiplying the number measured on shore at each of the other size groups by 3.26, which is an estimate of the frequency which would have been obtained had the number measured between 40 cm. and 51 cm. on shore been equal to the number measured between 40 cm. and 51 cm. at sea. The difference (column 6) between this calculated frequency and that actually obtained at sea is an estimate of the number discarded. This is expressed as a percentage of the number caught in column 7.

The smaller fish are discarded at sea since the plants do not accept them because the filleting of small fish is costly. The larger fish are discarded from the possibility that a great percentage of them would be thrown out on shore as jellied.

Since the variability in the ratio of sea to shore measurements is great even in the sizes defined as completely retained, and as there may be a bias in the measuring at sea in favour of the larger sizes the percentage discarded given for fish between 52-59 cm. is probably much too high.

# ECONOMIC FACTORS AFFECTING FISH CATCHING OPERATIONS

### 1953

### EAST COAST OF CANADA - GROUNDFISH

The total quantity of groundfish taken from Atlantic waters by Canadian fishermen in 1953 was considerably less than the catch in 1952. The degree in which this fact may be attributed to factors primarily economic cannot be determined precisely, since the latter often overlap with biological and even psychological factors. However, certain economic conditions undoubtedly bore considerable weight in determining the volume of effort applied to the groundfishery.

Fishermen experienced a somewhat unfavourable year in 1953 as compared with 1952. The price incentive to production was weakened as a result of deterioration in the market for fresh and frozen fish, beginning late in 1952 and prevailing throughout the first half of 1953. This factor strengthened during the later months of the year, however. The market for salted fish, on the other hand, was subjected to some stress and strain throughout the year. Returns to fishermen for the major groundfish species in the raw state were thus generally below the 1952 level by a cent or fraction thereof until the last few months of 1953. The bulk of the fish cured locally by fishermen had been caught before the salt fish market declined significantly, although the outlook was uncertain even before the "inshore" season began.

Fishermen generally relate production costs closely to the gross return for their product. During 1953, costs of vessel construction, materials and requisites continued to rise in most cases, thereby narrowing the fisherman's margin of profit. Despite this tendency a number of new and larger vessels, employing advanced catching techniques, were constructed in domestic shipyards or purchased from abroad.

The expanding use of catching devices employing smaller numbers of fishermen than those required by traditional methods, was accompanied by continuing mobility on the part of the fishing population. Throughout the Atlantic region, fishermen in increasing numbers left the industry to pursue occupations which offered greater monetary returns. The net result of changes in technique and manpower, on the whole, should be one of increased primary production.

At the beginning of 1954 the general outlook for the Atlantic groundfish industry seems to indicate little change from conditions as they were late in 1953. The prices of most of the products of the industry have followed the downward trend of world commodity prices from 1952 onwards, but began to level off late in 1953. The fresh and frozen trade depends upon market conditions in North America. At the time of writing (March 18, 1954), the decision of the U.S. Tariff Commission in the fillet case is still unknown and it remains a possible danger to the future trade in these products. To some extent it is being offset by the acceptance of new forms like fish sticks in the United States.

As far as salt fish is concerned there have been some encouraging developments recently: for example the extension of open general license in the British Caribbean and the opening of the Brazilian market which augur well for 1954. In general, however, conditions probably will not change significantly.

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DENMARK - 1953 (In metric tons round fresh)

Subdivisions	Cod	Halibut	Other Groundfish	Total
	<u> </u>	Subarea	1	
		<u>West Gree</u>	nland	
1 A	1,028.0	-	357•3	1,385.3
1 B	4,912.4	71.5	129.2	5,113.1
1 C	3,415.2	28.4	1,712.3	5,155.9
1 D	2,199.9	-	7.9	2,207.8
1 E	2,985.7	-	10.5	2,996.2
1 F	4,082.9	-	19.8	4,102.7
Total	18,624.1	99.9	2,237.0	20,961.0
		<u>Faroe</u>	<u>s</u>	
Total	27,552.0	-	-	27,552.0
GRAND TOTAL	46,176.1	99.9	2,237.0	48,513.0

	<u>Large</u>	<u>COD</u> Medium	<u>Small</u>	<u>Total</u>	
	1,310.0	<u>Subarea</u> 6,572.5	12,097.5	19,980.0	
	82.5	<u>Subarea</u> 2,290.0	<u>2</u> 25,120.0	27,492.5	
•		Subarea 8,310.0		-	
	4,587.5	Subarea 14,237.5	<u>4</u> 24,257.5	43,082.5	
TOTAL	8,272.5	31,410.0	73,287.5	112,970.0	

NOTE: In the statistics for previous years, the statistics for France were not broken down by subareas and it was indicated that part of the landings originated from outside the Convention Area. To the 1953 data should be added 618 metric tons of salted cod and 3,038 tons of fresh cod landed at St. Pierre and Miquelon by fishermen of these islands. As France fished in Subarea 4 sporadically over the years it should not be inferred that Subarea 4 is a traditional fishing area for France on the basis of the 1953 data.

ICELAND - 1953 (In metric tons round fresh )

Subarea 1	
Cod Haddock Redfish Other Groundfish	13,680.6 8.4 12,406.1 157.7
Total	26,252.8

NOTE: Conversion factor 1.20 was used for converting from gutted head on to round fresh. For previous years data were given in terms of round fresh fish.

ITALY - 1953 (In metric tons round fresh)

	COD	
Subarea 1 and 2	Subarea 3 and 4	<u>Total</u>
8,740.0	5,553.0	14,293.0

NORWAY - 1953 (In metric tons round fresh)

	Subarea	1	
	Long Liners	Otter Trawlers	<u>Total</u>
Cod Redfish Hallbut Other Groundfish	27,103.5 1.8 562.8 20.7	4,327.8 - -	31,431.3 1.8 562.8 20.7
Total	27,688.8	4,327.8	32,016.6

### Report

on the Norwegian Fisheries in the Convention Area, 1953.

In 1953, 55 Norwegian long liners and 4 trawlers took part in the fisheries off West Greenland. The landings amounted to 13,052.9 metric tons of salted cod, 8.6 metric tons of salted cusk, 335.— metric tons of fresh halibut and 1.8 metric tons of fresh redfish. In addition, 493.1 metric tons of cod liver oil, 14.— metric tons of fish meal and 2.— metric tons of fish body oil were produced. The value of the catch, including byproducts, amounted to 18.2 mill. Norwegian Kroner. The products sold readily, and prices were favourable.

While a few fishing vessels are known to have been fishing outside the Convention Area (East of Cape Farvel) these catches cannot be separated and are at any rate negligible. All landings of Norwegian vessels are therefore attributed to Subarea 1.

The long liners accounted for 11,255.6 metric tons of the landings of salted cod, and for all landings of cusk, halibut and redfish. 1953 is the first year for which records are available of Norwegian landings of cusk and redfish from these grounds.

During the years 1949-51 a considerable part of the catches by long liners was landed at Færingerhavn. In 1953, only 1945.5 metric tons of salted cod were landed in West Greenland and the remainder was brought to Norway by the fishing vessels themselves. The dæcrease in deliveries at Færingerhavn which started in 1952 has caused a reduction of the number of trips from 5.1 trips per vessel in 1950 to 2.1 trips per vessel in 1953.

The long liners left Norway somewhat earlier than in the preceding year. Most of the vessels put off in the latter half of April or the beginning of May. Nearly all vessels of which we have information returned to Norway in June-July. Half of these started the second trip in July or August. They were all back in Norway again in October.

During the 1953 fishing the skipper of each vessel was asked to keep a record showing the number of linesets, the number of hooks used and the amount of fish caught in each day. For the trawlers information was asked on the number and duration of the hauls together with details on the catch. The amount of fish caught was given for the long liners in terms of number of fish, and for the trawlers in terms of number of boxes. The average weight per fish and per box was then computed from data on the weight of the corresponding landings. The data on landings of salted fish refer everywhere to the weight as landed in Norway. Landings at Færingerhavn have been reduced by 7.5%, which makes out the average loss in weight during the transport to Norway.

Daily catch records are available for 70 out of 72 trips made by 34 long liners. From these trips 6,624.1 metric tons of salted cod, 6.- metric tons of salted cusk, 136.4 metric tons of fresh halibut and 1.8 metric tons of fresh redfish were landed. The data on the number of cod caught indicate an average weight per salted cod of 1.48 kgs. This figure, however, is thought to be somewhat too high as the number of small fish caught has not always been recounted.

The average number of days absent from Norway during each. trip was 56 days. Most vessels called at Faeringerhavn and the average number of days absent from port during the crossing was therefore a little less, about 53 days. The corresponding figure for 1952 was 40 days. The duration of each trip thus has increased. On the other hand, the duration of each crossing was considerably less in 1953 than in 1952 (75 days against 108 days). As mentioned above this is due to the fact that in 1953 the vessels fished more

independent of the base in Faeringerhavn.

The long liners made 4-5 sets per fishing day, a set consisting of 2,000 - 8,000 hooks (average about 2,900). The average catch per 1,000 hooks were 166 cod or 245 kgs. of salted cod.

The average yield per fishing day was 2,939 kgs. of salted cod in 1953 against 3,449 kgs., 3,287 kgs. and 2,464 kgs. respectively in the period 1950-52. These figures indicate a decrease in the yield per unit of fishing effort during the years 1950-52 and an increase in 1953, though not reaching the level of 1951 or 1950.

The average yield per fishing day for the trawlers was also less in 1952 than in 1950 (5,021 kgs. compared to 5,700 kgs.). The output per fishing day in 1953, which amounted to 5,784 kgs. of salted cod was, however, slightly larger than the corresponding figure for 1950.

Of the 4 Norwegian trawlers which were fishing in the Convention Area in 1953, one had a tonnage of only 223 gross tons. This vessel had in the preceding year been fishing with long lines and changed in 1953 to trawl as an experiment.

Each trawler made two trips to West Greenland. As to the first trip the vessels put off in April and May, and for the second trip one in July, two in August and one in September. One vessel returned from the last trip in October and the other three in the first half of November.

No landings were made by the trawlers in West Greenland. The trawlers only called at Faeringerhavn in order to get fresh supplies of water, salt etc. or for repair. The difference between the number of days absent from Norway and the number of days absent from port is for the most part owing to the fact that one trawler had engine trouble during the fishing.

The trawlers made 6-7 hauls per fishing day. The average yield per haul was 859 kgs. of salted cod and 678 kgs. per hour trawled.

In order to get an expression of the fishing effort expended with regard to the gross tonnage and number of men the number of ton-days fished (gross tons X days fished) and man-days fished (number of men X days fished) have been computed for each vessel. Such figures are given both for the long liners and trawlers.

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# PORTUGAL - 1953 (In metric tons round fresh)

# Otter Trawlers

Cod

	Large	Medium	Small	Total
Subarea 1 Subarea 2 Subarea 3 Subarea 4	464.1 785.2 7,720.1 4,379.3	7,249.3 14,477.1 15,507.9 6,759.6	1,970.5 24,932.9 10,674.8 2,059.6	9,683.9 40,195.2 33,902.8 13,198.5
Total	13,348.7	43,993.9	39,637.8	96,980.4
		Haddock		
Subarea 1 Subarea 2 Subarea 3 Subarea 4	-	- -	- - -	4.6 69.7 147.3 6.4
Total	-	· •	-	228.0
	:	Dory Schooner	<u>cs</u>	
	9	Cod		
	Large	Medium	Small	Total
Subarea 1 Subarea 3	5,858.9 8,273.2	22,841.0 9,081.6	16,114.4 4,737.1	44,814.3 22,091.9
Total	14,132.1	31,922.6	20,851.5	66,906.2
		COD		
GRAND TOTAL	27,480.8	75,916.5	60,489.3	163,886.6

NOTE: The above data are provisional. From Subarea 1, 2, 3 and 4, an additional 54.8, 240.3, 435.5 and 193.6 metric tons of cod respectively were caught by otter trawlers for consumption aboard the vessels. From Subarea 1 and 3, 591.6 and 407.1 metric tons of cod respectively were caught for the same purpose.

SPAIN - 1953 (In metric tons round fresh)

ļ	Cod			Haddock	ock			Other Groundfish	oundfis	- H	GRAND
Medium Small		Total	Large	Medium	Small	Total	Large	Medium	Small	Total	TOTAL
	Ì			Pair	Pair Trawlers	សា					
3,937.0 4,624.7 14,197.2		22,758.9	501.5	Su 2,354.3	Subarea 3 669.4	3,525.2	82.9	381.4	21.0	485.3	26,769°4
				Otte	Otter Trawlers	2 <u>1</u>	-				
679.1 2,247.5		2,932,4	ı	Sn 48.7	Subarea 1	48.7	ì	•	. 1	•	2,981.1
199.7 12,514.6 14,690.8	Η,	4.690.8	1	Sn 160.0	Subarea 2	160.0	ů	1.2		1,5	14,852.3
2,858.4 32,623.3 44,350.8 (6,794.9	,,,,	4,350.8 (6,794.9)	2,512.9	Subarea 3 10,042.6 4,194.6 16,750.1 (2,102.8)	lbarea 3 4,194.6	16,750.1 (2,102.8)	288.0	4.5.4	267.5	1,654.0 (153.1)	62,754.9
157.6 1,308.5		1,958.9	17.5	Su 221.6	Subarea 4 5 131.0	416.0 152.6 (45.9)	152.6	336.6	14.2	539.2 (35.8)	2,914.1
2,311.0 3,894.8 48,693.9 63,932.9	•	63,932.9	2,530.4	<u>Total Otter Trawlers</u> 10,472.9 4,325.6 17,374.8 GRAND TOTAL	Total Otter Trawlers, 472.9 4,325.6 17,3	<u>lers</u> 17,374.8	6.044	440.9 1,283.2	281.7	2,194.7	83,502°4
6,248.1 8,519.5 62,891.1		8,691.8	3,031.9	3,031.9 12,827.2 4,995.0 20,900.0 523.8 1,664.6 302.7 2,680.0	1,995.0	20,900.0	523.8	1,664.6	302.7	2,680.0	110,271.8

Data in parenthesis relates to quantities for which sizes were not indicated. These quantities are included in all totals. Contrary to the conversion factor 3.00 indicated, 2.50 was used as is the dase for the 1952 statistics. NOTE

UNITED KINGDOM - 1953 (In metric tons round fresh)

- 20 -

	Subarea			Mada 1	
<u> </u>	1	2	3	Total	
· ·	Otter T	rawlers	<del></del>		
Cod					
Large Medium	25,075.7	35.6	-	25,111.3	
Small	1,105.1	10.3		1,115.4	
Unsorted	800,4	747.5	- 1	1,547.9 6,218.0	
Total	5,938.6	Gos li	279.4	6,218.0	
TOURT	32,919.8	793.4	279.4	33,992.6	
Haddock					
Large	10.3	_	_	20.2	
Medium	1.5	_	_	10.3 1.5	
Small	2.3	-	_	2.3	
Unsorted	1.5	_	238.0	239.5	
Total	15.6	_	238.0	253.6	
Halibut			_	_,,,,,	
Unsorted	1.05 4		_	_	
onsor cea	403.6		8.0	411.6	
Redfish					
Unsorted	1,057.0	_	_	1 057 0	
	-,07/10	_	•	1,057.0	
Other Groundfish					
Unsorted	629.0	17.0	35.0	681.0	
MOMA *				002.0	
TOTAL	35,025.0	810,4	560.4	36,395.8	
				-	
Long Liners					
Cod					
Unsorted	1.5				
-11501 004	1.7	_	-	1.5	
Halibut					
Unsorted	12.6	-	_	12.6	
momet	-1				
TOTAL	14.1	-	-	14.1	
RAND TOTAL	35,039.1	810.4	560.4	36,409.9	
	ノリマ.コフ * 本	OTOVA	700.4	46.400 Q	

NOTE: Conversion factor used is 1.13 (preliminary) except for redfish which is landed whole.

UNITED STATES - 1953 (In metric tons round fresh )

		Subarea		Total
	3	4	5	Subareas
Cod			<u> </u>	
Large Medium	35.6 56.6	1,121.2	4,429.9 6,227.9	5,586.7 8,251.2
Small	23.5	435.3	568.5	1,027.3
Total	115.7	3,523.2	11,226.3	14,865.2
Haddock Large	125.9	11,392.2	21,948.4	33,466.5
Small	225.9	7,912.1 19,304.3	25,030.9	33,168.9
Total	351.8	19,304.3	46,979.3	66,635.4
Redfish	33,113.9	19,573.8	16,791.2	69,478.9
Halibut	11.5	45.4	104.1	161.0
Flounders	40.0	3,218.8	17,785.9	21,044.7
Other Groundfish	19.3	2,291.3	64,657.2	66,967.8
GRAND TOTAL	33,652,2	47,956.8	157,544.0	239,153.0

# GERMANY - 1953 (In metric tons )

# Subarea 1

<u>Species</u>	<u>Total 1953</u>	<u>Total 1952</u>
Cod Coalfish Redfish Wolffish Halibut Sharks Others	2,099 2 152 21 5 1 118	2,073 300 12 3 68
Total	2,398	2,456
	· <del></del>	

# Subarea 3

Species .	Total 1953
Cod Haddock Coalfish Redfish Wolffish Lemon Sole Halibut Rays and Skates Others	705 309 57 5 2 16 8 6 
TOURT	1,178

Two large otter trawlers conducted experiments in Subarea 3 in 1953. It is not known if that will be repeated in 1954. Up to date no trips this year (1954) have been made to Subarea 3 and only one was made to Subarea 1. No indications are given relative to the condition of the fish to which statistics refer.