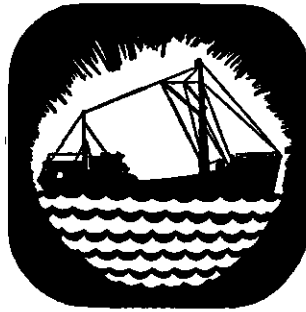


INTERNATIONAL COMMISSION

FOR THE

NORTHWEST ATLANTIC FISHERIES



SAMPLING YEARBOOK

VOLUME 9

for the year 1964

**By G. F. Schrader
L. R. Day**

**Issued from the Headquarters of the Commission
Dartmouth, N. S., Canada**

1966

PREFACE

This volume of the Sampling Yearbook summarizes length, age and weight data for cod, haddock, redfish, silver hake, American plaice, witch, yellowtail, winter flounder, pollock, cusk and herring collected during the calendar year 1964 in the ICNAF area.

Presentation of the data in this volume follows the 1964 recommendations of the Sampling Subcommittee (Redbook 1964, Pt. 1, p. 36-37)

- a) that countries be requested to continue to report length composition data as numbers per mille on the same time (month), area (statistical division), gear and vessel category basis as in previous years, and that for redfish and species of flounder and halibut (but not other species) they should also be broken down by sex, and for redfish by 50-fathom depth zones also. Other items of relevant information should also be reported and published in accordance with earlier recommendations (see "Report of Working Group on Sampling Yearbook"; Redbook 1962, Part 1, pp. 39-41). The importance of continuing to supply information on the number and weight of fish measured and the number and weight of fish caught or landed in the sampled fishery is particularly stressed.
- b) that age data for cod and haddock should, in future, be reported and published in the form of age-length keys grouped by quarters, statistical division, gear and vessel category. For all other species age data should continue to be reported as direct age-compositions as in the past.
- c) that when both length and age data are available for cod and haddock for the same fishery, they should be reported and published in a composite, tabular form.

Following the 1965 recommendations of the Subcommittee (Redbook 1965, Pt. 1, p. 69-70)

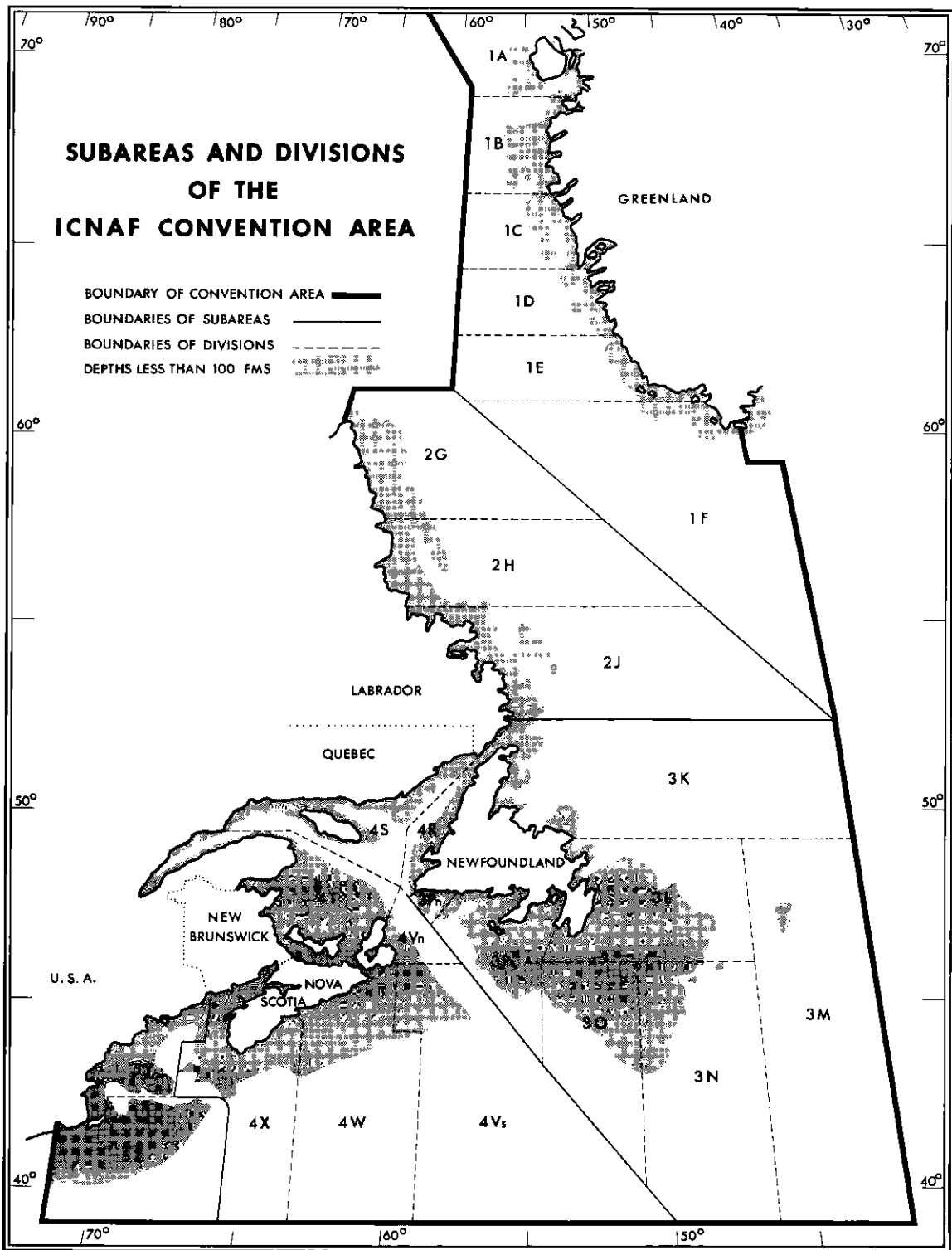
- i) that publication in the Sampling Yearbook of the age-length key data for 1961, 1962 and 1963 be deferred
- and
- ii) that within the next two years the Statistician of the ICNAF Secretariat make arrangements for transferring this age-length information to data-processing cards, and in association with ICNAF scientists carry out a study of the heterogeneity of the material with a view to preparing summary tables for study and eventual publication.

these age/length keys are, by courtesy of the Woods Hole laboratory of the U. S. Bureau of Commercial Fisheries, being transferred to data-processing cards for study of the heterogeneity of the material.

Where length data alone were submitted, length frequencies are reported for all species on a "per mille" basis. Where age data alone were submitted, age compositions are reported for all species except cod and haddock on a "per mille" basis. Where age and length data for cod and haddock were submitted but were not from the same fishery, age/length keys on an actual number basis are reported. Where age and length data for cod and haddock were submitted and were from the same fishery then there is reported, on a single form called the age/length table, 1) the age/length key, in actual numbers, of the composite quarterly age samples, 2) the length composition, in "per mille" of the composite monthly length samples and 3) the age composition of landings in each month of the quarter by using the age/length key to calculate the proportion of ages in each length group in the composite length compositions. It should be noted that the age composition of landings in each month of the quarter were calculated by the Federal Republic of Germany from an age/length key derived for the corresponding month of the quarter and not from the age/length key derived for the combined three months of the quarter as done by the other countries.

L. R. Day
Executive Secretary

April, 1966



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NOTES ON THE SAMPLING DATA

The "Notes on the Sampling Data" which appear below have been contributed by the reporting countries. Each contributor is required to report to the Secretariat any information, pertinent to the sampling data, that he wishes to have published.

Canada (Maritimes and Quebec)

Reported by: A. C. Kohler
D. N. Fitzgerald
A. Marcotte

Commercial landings of groundfish in the provinces of Nova Scotia, New Brunswick and Prince Edward Island have been continuously sampled for size and age composition since 1945. Sampling emphasis has been placed on landings by offshore vessels at the largest groundfish ports, but has also included sampling from the inshore fleets. Length frequencies from routine sampling of the commercial catches and landings and from sampling to measure discarding are reported to the Commission. Age-frequency data are not reported.

Landings of cod and haddock are normally culled by market category. Cod are divided into Large (Steak) and Medium (Market) sizes at about 10 pounds fresh gutted weight. Small (Scrod) cod and haddock are mainly less than 2 1/2 pounds gutted weight. Small round haddock are sometimes landed in a separate market category. These market categories are usually sampled approximately in proportion to the relative numbers of each in a trip landing. When the final weighout is available the length frequency of the landings is determined by applying weighting factors to each category. Other species reported are not usually culled by market category. Length frequencies by sexes are given for redfish and American plaice sampled in the Maritime Provinces.

Fork length measurements are recorded to the nearest centimetre for each fish. These measurements are reported by 3-cm groups for cod, 2-cm groups for haddock, white hake, pollock, and cusk, and 1-cm groups for redfish and flounders. Mesh size is recorded as the approximate inside, stretched, wet, used, measurement of an average codend mesh. Hook size is given by number, No. 6/0 being the smallest commercial groundfish hook and No. 14 being the largest hook used on longlines by Quebec.

Canada (Newfoundland)

Reported by: A. T. Pinhorn
A. W. May
J. O'brien

Length frequencies are based on sampling of the commercial landings of cod, haddock and American plaice. The research samples from Labrador were caught on commercial gears operated from a small research boat.

Measurements are of fork lengths recorded to the nearest centimetre and are carried out on shore, before appreciable culling by the plant has occurred. Samples of landings after discard indicate that discarding has taken place at sea before landing. Samples of landings before discard indicate that no discarding has occurred at sea before landing.

The sample frequencies are converted to numbers per mille, but are otherwise unadjusted.

The mesh sizes are difficult to sort since manilla, nylon, drylene, etc. can be used on the same trip and frequencies cannot be separated according to type of twine and size of mesh. Also, the mesh size given is often of the size dry as bought, before use - the only size that the fishermen generally know. The symbols used on the forms are as follows:

M = Manilla
N = Nylon
D = Drylene
C = Courlene

Denmark (Greenland)

Reported by: Paul M. Hansen

Length measurements are made of the total length (end of tail lobes) and recorded to the centimetre below.

Germany

Reported by: Arno Meyer

Length measurements are made of the total length (end of tail lobes) and recorded to the centimetre below.

Iceland

Reported by: Jon Jonsson

Length measurements are taken from total length to nearest centimetre. (Board is offset 0.5 cm to permit reading to nearest cm.)

Norway

Reported by: E. Bratberg

Measurements are made of the total length to the nearest centimetre, and not of the fork length as has been erroneously reported in earlier issues of the Sampling Yearbook.

Portugal

Reported by: Ruy Monteiro

Length measurements are made of the fork length recorded to the nearest centimetre.

United Kingdom

Reported by: J. A. Gulland

Measurements are made of the total length to the centimetre below.



TABLE 1 LENGTH FREQUENCIES - COD - 2G - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Jigger
CATCHES/LANDINGS	(Research)
MONTH	Catches before discard
COUNTRY	August
TONNAGE	Canada (Newfoundland)
	1
42-44	2
45-47	8
48-50	33
51-53	87
54-56	193
57-59	261
60-62	228
63-65	119
66-68	48
69-71	14
72-74	5
75-77	1
78-80	2
81-83	1
Total ‰	1002
Serial Numbers	-
Number of Samples	1
Number of Fish Measured	1952
Mean Length (cm)	58.63
Mean Weight (kg)	-
Total Weight Landed (tons)	-
Estimated Number Landed	-
Mesh(mm) or Hook(no.) Size	5
Range of Depths (fm)	3-10

1 small boats

TABLE 2

LENGTH FREQUENCIES - COD - 2H - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Jigger (Research)	
	Catches before discard	
CATCHES/LANDINGS	July	August
MONTH	Canada (Newfoundland)	
COUNTRY		
TONNAGE		
36-38	2	-
39-41	2	2
42-44	-	10
45-47	4	20
48-50	10	48
51-53	38	97
54-56	107	157
57-59	240	219
60-62	293	215
63-65	155	119
66-68	105	74
69-71	27	20
72-74	10	12
75-77	6	2
78-80	-	2
81-83	2	2
84-86	-	2
Total ‰	1001	1001
Serial Numbers	-	-
Number of Samples	1	1
Number of Fish Measured	522	503
Mean Length (cm)	60.62	58.71
Mean Weight (kg)	-	-
Total Weight Landed (tons)	-	-
Estimated Number Landed	-	-
Mesh(mm) or Hook(no.) Size	5	5
Range of Depths (fm)	5-18	5-30

¹ small boats

TABLE 3 LENGTH FREQUENCIES - COD - 2J - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl					
	(Commercial)					
CATCHES/LANDINGS	NK					
MONTH	March	April	May	June	September	October
COUNTRY	Spain					
TONNAGE	1200					
30-32	-	-	5	-	4	-
33-35	-	-	14	-	11	4
36-38	-	-	16	14	20	15
39-41	-	37	41	7	39	29
42-44	24	66	44	14	57	35
45-47	63	93	72	46	94	81
48-50	115	152	111	84	113	116
51-53	143	145	137	151	124	138
54-56	151	147	150	183	177	177
57-59	151	180	151	169	145	156
60-62	151	99	111	123	105	117
63-65	111	37	79	88	51	61
66-68	39	20	39	46	32	37
69-71	20	12	13	25	15	25
72-74	16	3	8	21	8	5
75-77	4	7	4	21	3	2
78-80	12	2	3	4	1	-
81-83	-	-	-	4	1	-
84-86	-	-	-	-	-	1
87-89	-	-	1	-	-	-
Total ‰	1000	1000	1000	1000	1000	999
Serial Numbers	-	-	-	-	-	-
Number of Samples	1	3	5	1	21	9
Number of Fish Measured	252	593	1400	284	4615	2142
Mean Length (cm)	-	-	-	-	-	-
Mean Weight (kg)	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	160 ¹	-	-	-	-	-
Range of Depths (fm)	-	-	-	-	-	-

¹ Mesh size - new, dry measure

TABLE 3
(cont'd)

LENGTH FREQUENCIES - COD - 2J - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl		Trap	Jigger		Gill-net	
	(Research)			(Commercial)			
CATCHES/LANDINGS	Catches		Landings before discard				
MONTH	June	June	July	July	August	July	August
COUNTRY	Poland		Canada (Newfoundland)				
TONNAGE	796		1				
18-20	-	1	-	-	-	-	-
21-23	1	3	-	-	-	-	-
24-26	8	23	-	-	-	-	-
27-29	26	56	-	-	-	-	-
30-32	36	77	-	-	-	-	-
33-35	86	66	2	-	-	-	-
36-38	101	68	38	1	-	-	-
39-41	139	72	102	3	2	-	-
42-44	103	87	103	6	2	-	-
45-47	108	73	72	5	2	-	-
48-50	123	100	65	18	5	-	-
51-53	114	98	84	36	25	-	-
54-56	68	115	84	81	69	6	1
57-59	39	77	103	119	102	109	3
60-62	27	43	101	150	144	139	25
63-65	13	23	81	148	162	273	104
66-68	6	6	58	122	142	200	177
69-71	2	6	38	99	116	127	244
72-74	-	2	29	70	78	49	185
75-77	-	2	18	40	65	61	109
78-80	-	1	10	35	33	12	87
81-83	-	-	8	23	16	12	31
84-86	-	1	2	16	21	-	18
87-89	-	-	2	10	4	6	6
90-92	-	-	1	6	4	6	5
93-95	-	-	1	4	2	-	-
96-98	-	-	-	2	3	-	4
99-101	-	-	-	2	1	-	-
102-104	-	-	-	1	-	-	1
105-107	-	-	-	1	-	-	-
108-110	-	-	-	-	2	-	-
111-113	-	-	-	1	-	-	-
114-116	-	-	-	1	-	-	-
117-119	-	-	-	-	-	-	-
120-122	-	-	-	1	-	-	-
123-125	-	-	-	-	-	-	-
126-128	-	-	-	1	-	-	-
Total ‰	1000	1000	1002	1002	1000	1000	1000
Serial Numbers	-	-	-	-	-	-	-
Number of Samples	2	3	9	5	9	2	3
Number of Fish Measured	1436	2423	1412	2335	994	165	786
Mean Length (cm)	44.7	46.3	54.69	65.38	66.15	66.11	71.56
Mean Weight (kg)	-	-	1.76	3.03	2.96	2.90	4.04
Total Weight Landed (tons)	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	110	100	3 1/2-4 ²	5	5	6 ²	6 ²
Range of Depths (fm)	95-220	165-250	7-9	5-20	7-20	4-10	12

¹ small boats² mesh size = inches

TABLE 4

LENGTH FREQUENCIES - COD - 3K - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl					
	(Commercial)				(Research)	
	NK					
	Catches					
CATCHES/LANDINGS						
MONTH	May	June	August	September	June	June
COUNTRY	Spain				Poland	
TONNAGE	1200				796	
15-17	-	-	-	-	1	10
18-20	-	-	-	-	23	-
21-23	-	-	-	-	33	10
24-26	-	-	-	-	54	30
27-29	-	-	-	-	100	50
30-32	3	-	-	-	98	-
33-35	8	3	2	12	68	20
36-38	12	8	4	19	71	79
39-41	27	24	9	33	77	40
42-44	52	38	24	54	81	70
45-47	63	46	40	71	75	138
48-50	88	60	70	109	77	98
51-53	133	89	130	123	72	118
54-56	135	140	206	161	67	108
57-59	126	134	127	137	44	40
60-62	96	121	160	104	24	79
63-65	82	113	90	61	10	50
66-68	66	81	51	40	8	20
69-71	35	53	37	31	4	10
72-74	16	30	26	12	4	10
75-77	18	17	13	7	1	-
78-80	15	21	4	7	-	-
81-83	4	4	-	2	3	20
84-86	3	7	2	5	1	-
87-89	5	1	4	-	1	-
90-92	5	3	-	2	3	-
93-95	1	3	-	-	-	-
96-98	1	2	-	5	-	-
99-101	2	1	-	-	-	-
102-104	1	-	-	2	-	-
105-107	2	-	-	2	-	-
108-110	1	-	-	-	-	-
111-113	-	-	-	-	-	-
114-116	-	-	-	-	-	-
117-119	-	-	-	-	-	-
120-122	1	1	-	-	-	-
123-125	-	-	-	-	-	-
126-128	-	-	-	-	-	-
129-131	-	-	-	-	-	-
132-134	-	-	-	-	-	-
135-137	-	-	-	-	-	-
138-140	-	1	-	-	-	-
Total ‰	1001	1001	999	999	1000	1000
Serial Numbers	-	-	-	-	-	-
Number of Samples	11	11	2	2	2	1
Number of Fish Measured	1593	1162	456	423	704	101
Mean Length (cm)	-	-	-	-	41.2	48.9
Mean Weight (kg)	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	160 ¹	-	-	-	100	100
Range of Depths (fm)	164	164	164	164	145-250	135-150

¹ Mesh size - new, dry measure

TABLE 4
(cont'd)

LENGTH FREQUENCIES - COD - 3K - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Long-line		Hand-line		
	(Commercial)				
CATCHES/LANDINGS	Landings before discards				
MONTH	June	July	June	July	September
COUNTRY	Canada (Newfoundland)				
TONNAGE	1				
30-32	-	-	-	-	6
33-35	-	-	7	-	15
36-38	-	-	29	8	45
39-41	-	-	66	13	64
42-44	-	3	96	24	83
45-47	3	4	81	50	115
48-50	5	13	98	60	104
51-53	14	19	86	92	87
54-56	30	45	98	152	89
57-59	48	68	93	195	91
60-62	42	76	119	162	68
63-65	71	104	64	112	53
66-68	92	106	57	57	36
69-71	75	99	34	34	28
72-74	106	105	33	20	26
75-77	102	77	19	13	34
78-80	88	62	7	4	19
81-83	84	69	8	1	9
84-86	71	46	4	1	9
87-89	52	27	-	1	6
90-92	39	18	-	-	4
93-95	30	13	-	-	2
96-98	17	10	-	-	2
99-101	9	8	-	1	-
102-104	8	12	-	-	2
105-107	4	4	-	-	-
108-110	2	4	-	-	-
111-113	1	1	-	-	-
114-116	2	1	-	-	-
117-119	3	1	-	-	-
120-122	1	1	-	-	-
123-125	-	-	-	-	-
126-128	-	1	-	-	2
129-131	-	-	-	-	-
132-134	-	-	-	-	-
135-137	1	-	-	-	-
Total ‰	1000	997	999	1000	999
Serial Numbers	-	-	-	-	-
Number of Samples	5	8	5	11	6
Number of Fish Measured	1000	1190	731	1567	470
Mean Length (cm)	75.34	71.56	54.87	58.09	54.76
Mean Weight (kg)	4.07	3.52	1.67	1.83	1.80
Total Weight Landed (tons)	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	15,6-0	15,6-0	3020,3021	3020,3021	3020,3021
Range of Depths (fm)	150-170	140-160	4-8	3-10	15-30

1 small boats

TABLE 4
(cont'd)

LENGTH FREQUENCIES - COD - 3K - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Trap		Gill-net		
	(Commercial)				
CATCHES/LANDINGS	Landings before discards				
MONTH	June	July	June	July	September
COUNTRY	Canada (Newfoundland)				
TONNAGE	1				
30-32	-	1	-	-	-
33-35	5	13	-	-	-
36-38	29	40	-	1	-
39-41	72	77	-	1	-
42-44	101	105	3	5	-
45-47	114	124	-	4	-
48-50	114	117	3	5	-
51-53	99	117	6	8	5
54-56	106	117	9	11	5
57-59	101	108	12	32	-
60-62	91	78	36	55	69
63-65	60	49	110	82	99
66-68	43	23	138	114	129
69-71	27	13	132	128	134
72-74	15	7	135	141	124
75-77	9	4	132	115	114
78-80	6	2	99	94	94
81-83	2	2	54	71	44
84-86	2	-	42	50	35
87-89	1	-	27	23	35
90-92	1	-	15	20	44
93-95	1	-	18	10	30
96-98	-	-	12	10	20
99-101	1	-	3	6	15
102-104	-	-	-	5	-
105-107	-	-	3	3	-
108-110	-	-	3	2	-
111-113	-	-	6	3	5
114-116	-	-	3	-	-
Total ‰	1000	997	1001	999	1001
Serial Numbers	-	-	-	-	-
Number of Samples	17	33	5	40	4
Number of Fish Measured	3597	9338	334	3164	202
Mean Length (cm)	53.25	51.41	73.70	73.14	74.66
Mean Weight (kg)	1.46	1.29	3.67	3.77	4.22
Total Weight Landed (tons)	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	3 1/2-4 ²	3 1/2-4 ²	6-7 ³	6-7 ³	6-7 ³
Range of Depths (fm)	8-30	7-18	10-50	10-50	20-35

1 small boats
 2 Mesh size - inches (cotton)
 3 Mesh size - inches (nylon)

TABLE 5

LENGTH FREQUENCIES - COD - 3L - 1964

(FREQUENCIES IN %/oo - 3 CM GROUPS)

GEAR	Otter Trawl (Commercial)				
	CATCHES/LANDINGS	Catches ⁴ July	Landings after discard		
April			May	June	
MONTH	Portugal	Canada (Newfoundland)			
COUNTRY	Portugal	Canada (Newfoundland)			
TONNAGE	1287.6	151-500			
36-38	-	-	-	-	17
39-41	9	13	1	-	74
42-44	61	39	16	7	152
45-47	69	60	72	7	178
48-50	94	93	101	7	163
51-53	123	81	111	7	125
54-56	140	120	118	-	59
57-59	120	127	116	29	41
60-62	117	63	110	7	40
63-65	98	68	63	36	56
66-68	55	65	62	14	20
69-71	25	76	50	50	30
72-74	27	37	40	58	10
75-77	17	39	39	86	13
78-80	6	39	21	79	7
81-83	11	24	22	79	8
84-86	8	10	13	65	5
87-89	4	13	9	72	-
90-92	6	2	12	94	-
93-95	4	10	5	50	2
96-98	4	6	7	50	-
99-101	-	2	1	50	-
102-104	1	2	1	29	-
105-107	1	2	4	36	-
108-110	-	3	3	7	-
111-113	-	3	-	29	-
114-116	-	-	-	29	-
117-119	-	2	2	14	-
120-122	-	2	-	7	-
Total %/oo	1000	1001	999	998	1000
Serial Numbers	44-46-47	-	-	-	-
Number of Samples	3	2	5	1	2
Number of Fish Measured	786	616	967	139	606
Mean Length (cm)	57.9	61.68	61.11	85.45	51.43
Mean Weight (kg)	-	2.39	2.34	5.72	1.40
Total Weight Landed (tons)	7705	693	2149	1668	928
Estimated Number Landed	-	290400	919506	293484	660831
Mesh(mm) or Hook(no.) Size	114	4 1/2 ¹	4 1/4-4 1/2 ²	4 1/4 ¹	4 1/2 ³
Range of Depths (fm)	105-130	68-90	34-95	50-85	20-35

Mesh sizes:

- 1 inches - manilla
- 2 inches - manilla and nylon
- 3 inches - manilla and courelene

⁴ catches after discards

TABLE 5
(cont'd)

LENGTH FREQUENCIES - COD - 3L - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl					
	(Commercial)				(Research)	
CATCHES/LANDINGS	NK					
MONTH	March	May	June	August	June	June
COUNTRY	Spain				Poland	
TONNAGE	1200				796	
15-17	-	-	-	-	5	-
18-20	-	-	-	-	-	-
21-23	-	-	-	-	14	-
24-26	-	-	-	-	5	3
27-29	-	-	-	-	10	19
30-32	-	-	-	6	38	13
33-35	-	-	2	11	19	13
36-38	-	1	2	20	29	29
39-41	-	5	-	39	67	60
42-44	5	11	2	51	53	50
45-47	6	24	7	66	67	57
48-50	6	26	14	67	62	38
51-53	25	40	45	96	38	67
54-56	14	100	81	140	38	57
57-59	18	105	81	121	67	60
60-62	29	109	43	119	43	63
63-65	32	90	57	75	53	41
66-68	49	69	81	52	34	32
69-71	68	75	76	33	34	38
72-74	51	68	62	22	43	25
75-77	88	53	52	13	38	13
78-80	111	47	57	13	29	32
81-83	113	33	83	7	48	29
84-86	97	31	71	7	24	54
87-89	114	37	52	4	10	70
90-92	57	20	14	3	24	19
93-95	28	23	36	4	33	22
96-98	31	5	17	2	9	25
99-101	25	8	12	3	19	10
102-104	11	5	12	1	19	13
105-107	3	1	-	5	5	13
108-110	5	10	24	-	9	10
111-113	3	3	5	-	5	16
114-116	3	-	2	-	-	3
117-119	2	-	-	-	-	3
120-122	2	-	5	-	9	-
123-125	-	-	-	-	-	3
126-128	-	-	-	-	-	-
129-131	-	-	5	-	-	-
132-134	5	-	-	-	-	-
Total ‰	1001	999	1000	1000	1000	1000
Serial Numbers	-	-	-	-	-	-
Number of Samples	3	5	2	32	1	1
Number of Fish Measured	648	1103	421	7416	209	315
Mean Length (cm)	-	-	-	-	61.9	65.3
Mean Weight (kg)	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	160 ¹	-	-	-	100	100
Range of Depths (fm)	109	109	109	109	80	40

¹ Mesh size - new, dry measure

TABLE 5
(cont'd)

LENGTH FREQUENCIES - COD - 3L - 1964

(FREQUENCIES IN %/oo - 3 CM GROUPS)

GEAR	Line Trawl		Long-line		Hand-line		
	(Commercial)						
CATCHES/LANDINGS	Landings before discard						
MONTH	September	June	July	September	June	July	September
COUNTRY	Canada (Newfoundland)						
TONNAGE	1						
33-35	8	3	-	-	1	1	7
36-38	39	-	3	3	11	13	126
39-41	77	3	4	10	31	39	161
42-44	114	20	10	30	70	63	119
45-47	95	20	18	42	71	72	140
48-50	90	20	35	55	98	75	70
51-53	89	85	68	60	104	98	56
54-56	82	98	110	65	111	112	63
57-59	77	100	142	84	142	120	42
60-62	72	149	148	99	104	127	63
63-65	57	98	113	99	80	99	21
66-68	50	95	98	90	73	68	28
69-71	38	75	64	72	31	43	35
72-74	29	54	49	53	27	24	35
75-77	22	38	30	50	16	15	-
78-80	12	33	29	44	7	13	14
81-83	12	15	20	34	7	6	-
84-86	7	31	15	26	5	4	7
87-89	9	18	14	17	2	1	-
90-92	8	8	9	15	2	3	-
93-95	3	18	6	14	2	3	14
96-98	4	10	5	9	1	-	-
99-101	2	3	4	10	-	1	-
102-104	1	-	2	6	-	-	-
105-107	1	-	3	5	1	-	-
108-110	-	-	1	2	1	-	-
111-113	-	3	-	3	-	-	-
114-116	1	-	-	2	-	-	-
117-119	-	3	-	1	-	-	-
120-122	1	-	-	-	1	-	-
Total %/oo	1000	1000	1000	1000	999	1000	1001
Serial Numbers	-	-	-	-	-	-	-
Number of Samples	11	3	10	8	6	12	1
Number of Fish Measured	1538	389	1763	2402	990	2114	143
Mean Length (cm)	55.28	64.83	63.57	65.68	56.80	57.13	50.18
Mean Weight (kg)	1.80	2.53	2.35	2.89	1.84	1.81	1.38
Total Weight Landed (tons)	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	15	17	17	17	3020, 3021	3020, 3021	3020, 3021
Range of Depths (fm)	20-40	135-150	130-150	10-40	5-13	4-15	28

1 small boats

TABLE 5
(cont'd)

LENGTH FREQUENCIES - COD - 3L - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Trap			Gill-net		
	(Commercial)					
CATCHES/LANDINGS	Landings before discard					
MONTH	June	July	August	May	June	July
COUNTRY	Canada (Newfoundland)					
TONNAGE	1					
33-35	1	3	-	-	-	-
36-38	7	15	32	1	-	-
39-41	34	49	99	1	-	-
42-44	81	91	91	1	-	-
45-47	155	112	142	-	-	2
48-50	145	111	170	1	-	2
51-53	133	111	111	1	-	1
54-56	128	109	95	3	-	4
57-59	99	107	51	6	-	6
60-62	83	94	75	9	5	16
63-65	49	73	40	23	49	27
66-68	42	51	40	37	49	37
69-71	21	29	20	92	107	86
72-74	10	16	20	141	112	122
75-77	2	11	4	171	102	130
78-80	4	7	8	140	98	122
81-83	4	3	-	107	112	106
84-86	1	3	4	65	93	69
87-89	1	1	-	49	68	53
90-92	-	1	-	49	54	44
93-95	-	1	-	28	34	46
96-98	-	-	-	21	63	37
99-101	-	1	-	22	39	34
102-104	-	-	-	16	5	15
105-107	-	-	-	9	5	16
108-110	-	-	-	3	5	16
111-113	-	-	-	1	-	3
114-116	-	-	-	3	-	5
117-119	-	-	-	1	-	2
120-122	-	-	-	-	-	-
123-125	-	-	-	-	-	-
126-128	-	-	-	-	-	1
Total ‰	1000	999	1002	1001	1000	1002
Serial Numbers	-	-	-	-	-	-
Number of Samples	5	25	1	3	1	6
Number of Fish Measured	1359	7699	253	1587	205	1283
Mean Length (cm)	53.25	54.43	51.72	79.39	80.67	81.08
Mean Weight (kg)	1.50	1.61	1.40	4.62	4.83	4.97
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	-	-	-	-
Range of Depths (fm)	11-17 ⁴	9-16.5 ⁴	12-14 ⁴	30-60 ^{6-7³}	13-18 ^{6-7³}	9-22 ^{6-7³}

- 1 small boats
2 inches - cotton
3 inches - nylon

TABLE 6

LENGTH FREQUENCIES - COD - 3M - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl	
	(Commercial)	(Research)
CATCHES/LANDINGS	NK	Catches
MONTH	March	June
COUNTRY	Spain	Poland
TONNAGE	1200	796
15-17	-	4
18-20	-	8
21-23	-	112
24-26	-	66
27-29	-	19
30-32	-	31
33-35	-	85
36-38	-	116
39-41	-	105
42-44	4	171
45-47	9	140
48-50	26	70
51-53	62	27
54-56	159	23
57-59	128	12
60-62	163	4
63-65	132	4
66-68	106	-
69-71	115	-
72-74	84	-
75-77	9	-
78-80	4	-
81-83	-	3
Total ‰	1001	1000
Serial Numbers	-	-
Number of Samples	1	1
Number of Fish Measured	227	258
Mean Length (cm)	-	38.6
Mean Weight (kg)	-	-
Total Weight Landed (tons)	-	-
Estimated Number Landed	-	-
Mesh(mm) or Hook(no.) Size	160 ¹	100
Range of Depths (fm)	219	145-155

¹ Mesh size - new, dry measure

TABLE 7

LENGTH FREQUENCIES - COD - 3N - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl (Commercial)		
	Landings after discard	NK	
CATCHES/LANDINGS	June	July	August
MONTH	Canada (Newfoundland)	Spain	
COUNTRY	151-500	1200	
TONNAGE			
30-32	-	15	49
33-35	-	26	56
36-38	9	45	43
39-41	24	66	100
42-44	43	115	95
45-47	64	115	87
48-50	71	110	100
51-53	120	104	101
54-56	133	112	99
57-59	182	80	82
60-62	129	62	70
63-65	90	46	49
66-68	52	37	23
69-71	47	22	13
72-74	21	17	9
75-77	6	9	5
78-80	6	4	7
81-83	2	3	-
84-86	-	2	4
87-89	-	3	2
90-92	-	2	1
93-95	-	3	2
96-98	-	1	1
99-101	-	-	1
102-104	-	1	1
Total ‰	999	1000	1000
Serial Numbers	-	-	-
Number of Samples	2	11	4
Number of Fish Measured	466	2755	989
Mean Length (cm)	56.76	-	-
Mean Weight (kg)	1.65	-	-
Total Weight Landed (tons)	247	-	-
Estimated Number Landed	149483	-	-
Mesh(mm) or Hook(no.) Size	4 1/2 ¹	160 ²	-
Range of Depths (fm)	50-95	30	30

1 inches - manilla

2 mm - new, dry measure

GEAR	Otter Trawl (Commercial)
CATCHES/LANDINGS	Landings after discard
MONTH	May
COUNTRY	Canada (Newfoundland)
TONNAGE	151-500
42-44	5
45-47	15
48-50	25
51-53	40
54-56	80
57-59	85
60-62	110
63-65	55
66-68	65
69-71	90
72-74	45
75-77	65
78-80	45
81-83	60
84-86	55
87-89	15
90-92	40
93-95	15
96-98	35
99-101	15
102-104	20
105-107	5
108-110	5
111-113	5
114-116	-
117-119	-
120-122	-
123-125	5
Total ‰	1000
Serial Numbers	-
Number of Samples	1
Number of Fish Measured	200
Mean Length (cm)	71.38
Mean Weight (kg)	3.83
Total Weight Landed (tons)	200
Estimated Number Landed	52632
Mesh(mm) or Hook(no.) Size	1
Range of Depths (fm)	33-43

¹ nylon, large

TABLE 9

LENGTH FREQUENCIES - COD - 3Pn - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl
	(Commercial)
CATCHES/LANDINGS	NK
MONTH	February
COUNTRY	Spain
TONNAGE	1200
36-38	2
39-41	11
42-44	12
45-47	37
48-50	82
51-53	137
54-56	180
57-59	145
60-62	131
63-65	121
66-68	80
69-71	22
72-74	11
75-77	12
78-80	3
81-83	3
84-86	5
87-89	-
90-92	2
93-95	-
96-98	2
99-101	1
Total ‰	999
Serial Numbers	-
Number of Samples	4
Number of Fish Measured	842
Mean Length (cm)	-
Mean Weight (kg)	-
Total Weight Landed (tons)	-
Estimated Number Landed	-
Mesh(mm) or Hook(no.) Size	160 ¹
Range of Depths (fm)	137

¹ mesh size - new, dry measure

TABLE 10 LENGTH FREQUENCIES - COD - 3Ps - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl	Line Trawl		
		(Commercial)		
CATCHES/LANDINGS	Landings after discard	Landings before discard		
MONTH	January	September	October	November
COUNTRY	Canada (Newfoundland)			
TONNAGE	151-500	1		
33-35	-	11	-	7
36-38	-	39	5	21
39-41	-	53	56	29
42-44	11	73	46	50
45-47	97	97	117	64
48-50	112	92	128	57
51-53	139	110	107	64
54-56	161	79	61	71
57-59	139	92	117	86
60-62	120	74	51	114
63-65	75	72	61	93
66-68	26	54	36	100
69-71	41	42	36	79
72-74	26	34	41	50
75-77	8	23	15	57
78-80	4	13	15	29
81-83	22	11	15	14
84-86	4	8	20	-
87-89	4	7	10	7
90-92	-	3	20	-
93-95	7	4	20	-
96-98	4	2	5	7
99-101	-	-	-	-
102-104	-	2	15	-
105-107	-	-	-	-
108-110	-	1	-	-
111-113	-	-	-	-
114-116	-	1	-	-
117-119	-	1	-	-
Total ‰	1000	998	997	999
Serial Numbers	-	-	-	-
Number of Samples	1	8	1	1
Number of Fish Measured	267	2644	196	140
Mean Length (cm)	57.6	56.08	58.74	60.20
Mean Weight (kg)	1.90	1.90	2.14	2.16
Total Weight Landed (tons)	206	-	-	-
Estimated Number Landed	108700	-	-	-
Mesh(mm) or Hook(no.) Size	4 1/2 ¹	15,16,6-0	15,16,6-0	15,16,6-0
Range of Depths (fm)	90-100	18-70	20-50	50-60

¹ Mesh size - inches, drylene

TABLE 10 LENGTH FREQUENCIES - COD - 3Ps - 1964
(cont'd)

(FREQUENCIES IN % - 3 CM GROUPS)

GEAR	Trap		Gill-net		
	(Commercial)				
CATCHES/LANDINGS	Landings before discards				
MONTH	June	July	May	June	July
COUNTRY	Canada (Newfoundland)				
TONNAGE	t				
30-32	8	4	-	-	-
33-35	55	43	-	-	-
36-38	178	148	1	-	-
39-41	273	202	4	1	1
42-44	237	217	6	1	2
45-47	130	156	5	3	1
48-50	68	89	5	3	3
51-53	33	60	9	7	4
54-56	8	30	5	9	9
57-59	5	20	18	22	32
60-62	4	12	37	46	51
63-65	1	8	68	93	86
66-68	1	7	111	146	136
69-71	-	3	148	147	147
72-74	-	1	148	144	141
75-77	-	1	132	117	93
78-80	-	-	109	77	85
81-83	-	-	79	54	74
84-86	-	-	43	41	44
87-89	-	-	26	24	28
90-92	-	-	20	24	19
93-95	-	-	11	13	14
96-98	-	-	6	12	9
99-101	-	-	5	4	6
102-104	-	-	3	5	7
105-107	-	-	2	2	2
108-110	-	-	2	1	3
111-113	-	-	1	2	2
114-116	-	-	-	1	1
117-119	-	-	-	-	-
120-122	-	-	-	1	2
Total %	1001	1001	1004	1000	1002
Serial Numbers	-	-	-	-	-
Number of Samples	9	6	18	7	7
Number of Fish Measured	2302	1478	1879	1553	1262
Mean Length (cm)	41.91	43.97	73.49	73.11	73.46
Mean Weight (kg)	0.82	0.88	3.62	3.66	3.72
Total Weight Landed (tons)	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	4 ²	4 ²	6-7 ³	6-7 ³	6-7 ³
Range of Depths (fm)	11-14	11-13	25-70	12-80	12-80

- 1 small boats
2 inches - cotton
3 inches - nylon

TABLE 11 LENGTH FREQUENCIES - COD - 4R - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl		Trap
	(Commercial)		
CATCHES/LANDINGS	Landings		Landings before discard
MONTH	May	September	July
COUNTRY	Canada (Maritimes)		Canada (Newfoundland)
TONNAGE	151-500		1
30-32	-	-	77
33-35	-	-	292
36-38	-	-	277
39-41	3	10	162
42-44	37	31	100
45-47	91	63	15
48-50	95	67	31
51-53	175	126	8
54-56	169	174	8
57-59	116	183	15
60-62	109	130	8
63-65	54	79	8
66-68	33	48	-
69-71	21	27	-
72-74	21	10	-
75-77	10	7	-
78-80	22	21	-
81-83	8	7	-
84-86	9	10	-
87-89	5	3	-
90-92	5	3	-
93-95	7	-	-
96-98	3	-	-
99-101	4	-	-
102-104	2	-	-
105-107	-	-	-
108-110	2	-	-
Total ‰/oo	1001	999	1001
Serial Numbers	1	2	-
Number of Samples	1	1	1
Number of Fish Measured	438	344	130
Mean Length (cm)	57.5	57.7	38.24
Mean Weight (kg)	1.83	1.70	-
Total Weight Landed (tons)	-	-	-
Estimated Number Landed	-	-	-
Mesh(mm) or Hook(no.) Size	4 1/2 ²	3 1/2 ²	3 1/2-4 ²
Range of Depths (fm)	76-84	130-145	10

¹ small boats² mesh size - inches

TABLE 12

LENGTH FREQUENCIES - COD - 4R-4S-4V - 1964

(FREQUENCIES IN % - 3 CM GROUPS)

GEAR	Otter Trawl (Commercial)
CATCHES/LANDINGS	Landings
MONTH	September
COUNTRY	Canada (Maritimes)
TONNAGE	51-150
42-44	8
45-47	23
48-50	54
51-53	72
54-56	117
57-59	151
60-62	136
63-65	88
66-68	91
69-71	75
72-74	48
75-77	28
78-80	34
81-83	25
84-86	14
87-89	12
90-92	8
93-95	2
96-98	5
99-101	-
102-104	1
105-107	6
108-110	-
111-113	2
114-116	-
117-119	1
Total %	1001
Serial Numbers	3-5
Number of Samples	3
Number of Fish Measured	649
Mean Length (cm)	63.3
Mean Weight (kg)	2.32
Total Weight Landed (tons)	-
Estimated Number Landed	-
Mesh(mm) or Hook(no.) Size	3 1/2 ¹
Range of Depths (fm)	125-150

¹ Mesh size - inches

TABLE 13

LENGTH FREQUENCIES - COD - 48 - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl		
	(Commercial)		
CATCHES/LANDINGS	Landings		
MONTH	June	September	September
COUNTRY	Canada (Quebec)		Canada (Maritimes)
TONNAGE	26-50		51-150
39-41	-	11	13
42-44	20	56	73
45-47	122	149	91
48-50	216	149	113
51-53	264	165	193
54-56	149	155	142
57-59	124	123	122
60-62	55	85	87
63-65	25	51	60
66-68	7	16	43
69-71	2	5	17
72-74	7	11	13
75-77	5	13	10
78-80	-	5	10
81-83	-	-	13
84-86	2	-	-
87-89	-	-	-
90-92	-	-	-
93-95	-	-	-
96-98	-	-	-
99-101	-	-	-
102-104	-	5	-
Total ‰	998	999	1000
Serial Numbers	-	-	6
Number of Samples	1	1	1
Number of Fish Measured	402	375	359
Mean Length (cm)	52.93	53.87	55.1
Mean Weight (kg)	-	-	1.54
Total Weight Landed (tons)	3	9	-
Estimated Number Landed	-	-	-
Mesh(mm) or Hook(no.) Size	4 1/2 ¹	4 1/2 ¹	4 1/2 ¹
Range of Depths (fm)	52	100	100-150

¹ Mesh size - inches

TABLE 14

LENGTH FREQUENCIES - COD - 4T - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl (Commercial)						
	Landings						
CATCHES/LANDINGS	June	July	August	September	June	July	August
MONTH	Canada (Maritimes)			Canada (Quebec)			
COUNTRY	26-50 and 51-150			26-50			
TONNAGE							
33-35	-	-	3	5	-	-	1
36-38	3	8	21	29	-	3	-
39-41	51	48	67	84	4	-	2
42-44	170	121	138	151	2	6	14
45-47	152	169	176	183	44	78	76
48-50	174	185	179	155	156	191	193
51-53	125	140	125	98	211	188	191
54-56	88	102	76	68	156	175	132
57-59	63	71	52	57	90	94	127
60-62	44	48	47	40	106	91	96
63-65	32	29	29	33	53	32	48
66-68	16	17	19	24	48	32	32
69-71	8	13	14	13	51	29	17
72-74	16	9	8	12	20	13	19
75-77	8	8	7	10	13	13	11
78-80	6	8	7	7	11	13	9
81-83	6	8	6	7	7	16	11
84-86	5	6	4	5	7	16	5
87-89	10	4	3	5	11	3	4
90-92	6	2	4	6	-	3	3
93-95	5	2	2	2	-	-	4
96-98	5	1	5	2	-	-	1
99-101	1	-	1	1	2	-	2
102-104	-	-	2	-	2	3	-
105-107	2	1	1	1	-	-	1
108-110	2	1	2	-	-	-	-
111-113	1	-	-	1	2	-	-
114-116	1	-	-	-	-	-	1
117-119	-	-	1	-	2	-	-
120-122	-	-	-	1	-	-	-
123-125	1	-	-	-	-	-	-
Total ‰	1001	1001	999	1000	998	999	1000
Serial Numbers	7-9	10-15	16-21	22-27	-	-	-
Number of Samples	3	6	6	6	2	1	5
Number of Fish Measured	1014	2765	2735	2630	454	309	1611
Mean Length (cm)	52.7	52.1	51.6	51.3	57.8	56.5	56.3
Mean Weight (kg)	1.36	1.32	1.39	1.40	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	4 $\frac{1}{2}$ -4 $\frac{3}{4}$ ¹	4 $\frac{1}{2}$ -4 $\frac{7}{8}$ ¹	4-5 ¹	4-5 ¹	4 $\frac{1}{2}$ ¹	4 $\frac{1}{2}$ ¹	4 $\frac{1}{2}$ ¹
Range of Depths (fm)	30-110	40-60	25-100	40-60	40-75	75	45-90

¹ Mesh size - inches

TABLE 14
(cont'd)

LENGTH FREQUENCIES - COD - 4T - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Line Trawl		
	(Commercial)		
CATCHES/LANDINGS	Landings		
MONTH	June	July	August
COUNTRY	Canada (Quebec)		
TONNAGE	0-25		
33-35	2	3	-
36-38	2	-	-
39-41	2	3	11
42-44	23	3	6
45-47	45	20	52
48-50	62	23	50
51-53	110	46	99
54-56	121	36	69
57-59	92	62	74
60-62	115	72	88
63-65	75	72	22
66-68	52	59	44
69-71	50	62	44
72-74	55	46	39
75-77	27	39	58
78-80	43	39	44
81-83	28	59	19
84-86	23	39	47
87-89	27	42	22
90-92	17	49	22
93-95	8	26	19
96-98	7	20	25
99-101	2	33	14
102-104	2	26	11
105-107	3	33	28
108-110	-	13	22
111-113	2	26	8
114-116	3	20	6
117-119	3	10	17
120-122	-	7	8
123-125	-	10	5
126-128	-	7	14
129-131	-	-	6
132-134	-	-	-
135-137	2	-	3
138-140	-	-	-
141-143	-	-	6
Total ‰	1003	1005	1002
Serial Numbers	-	-	-
Number of Samples	1	1	1
Number of Fish Measured	601	307	363
Mean Length (cm)	63.63	77.54	72.61
Mean Weight (kg)	-	-	-
Total Weight Landed (tons)	1.22	1.08	2.27
Estimated Number Landed	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	-
Range of Depths (fm)	20	25	24

TABLE 15

LENGTH FREQUENCIES - COD - 4Vn - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl (Commercial)				
	Landings				Landings ¹
CATCHES/LANDINGS					
MONTH	February	May	June	October	March
COUNTRY	Canada (Maritimes)				Canada (Nfld.)
TONNAGE	151-500				
30-32	-	-	-	-	1
33-35	-	-	-	-	7
36-38	12	-	-	-	52
39-41	55	-	39	5	121
42-44	144	9	110	54	192
45-47	238	80	109	120	258
48-50	252	160	140	204	189
51-53	123	167	153	173	87
54-56	80	177	155	162	45
57-59	50	111	130	96	18
60-62	17	76	70	63	14
63-65	5	59	22	43	7
66-68	2	37	17	24	3
69-71	5	37	12	17	2
72-74	2	15	8	15	1
75-77	3	25	-	11	2
78-80	5	10	4	6	-
81-83	2	18	8	4	1
84-86	1	6	6	1	-
87-89	1	4	3	1	1
90-92	-	4	2	1	-
93-95	2	2	1	-	-
96-98	1	1	2	-	-
99-101	-	2	2	-	-
102-104	-	-	1	-	-
105-107	-	-	-	-	-
108-110	-	-	1	-	-
111-113	-	-	1	-	-
114-116	-	-	1	-	-
117-119	-	-	1	-	-
120-122	-	-	1	-	-
123-125	-	-	1	-	-
Total ‰	1000	1000	1000	1000	1001
Serial Numbers	28	29	30	31	-
Number of Samples	1	1	1	1	6
Number of Fish Measured	429	412	496	385	1796
Mean Length (cm)	49.1	57.2	53.6	53.9	46.49
Mean Weight (kg)	1.40	1.47	1.57	1.43	0.93
Total Weight Landed (tons)	-	-	-	-	4275
Estimated Number Landed	-	-	-	-	4625241
Mesh(mm) or Hook(no.) Size	4 1/2 ²	4 1/2 ²	3 5/8 ²	4 1/8 ²	3
Range of Depths (fm)	85-110	85-110	70-80	55-75	85-120

¹ Landings after discard² Mesh size - inches³ Mesh size - large (manilla and nylon)

TABLE 15
(cont'd)

LENGTH FREQUENCIES - COD - 4Vn - 1964

(FREQUENCIES IN ‰/oo - 3 CM GROUPS)

GEAR	Otter Trawl	Long-line	
		(Commercial)	
CATCHES/LANDINGS	NK	Landings	
MONTH	February	September	December
COUNTRY	Spain	Canada (Maritimes)	
TONNAGE	1200	0-25	
33-35	5	-	-
36-38	16	4	4
39-41	52	20	7
42-44	98	39	17
45-47	136	60	16
48-50	132	129	78
51-53	159	107	103
54-56	147	94	89
57-59	127	90	84
60-62	67	116	98
63-65	32	143	98
66-68	11	94	64
69-71	10	22	59
72-74	4	18	39
75-77	1	32	76
78-80	1	10	16
81-83	-	4	29
84-86	1	7	29
87-89	-	3	19
90-92	1	1	13
93-95	-	3	11
96-98	-	2	21
99-101	1	2	16
102-104	-	-	3
105-107	-	-	3
108-110	-	-	3
111-113	-	-	3
114-116	-	-	-
117-119	-	-	-
120-122	-	-	3
123-125	-	1	-
Total ‰/oo	1001	1001	1001
Serial Numbers	-	43	44
Number of Samples	5	1	1
Number of Fish Measured	1232	302	327
Mean Length (cm)	-	58.3	65.4
Mean Weight (kg)	-	2.06	3.11
Total Weight Landed (tons)	-	-	-
Estimated Number Landed	-	-	-
Mesh(mm) or Hook(no.) Size	160 ¹	6/0	16
Range of Depths (fm)	82	25-35	65-75

¹ Mesh size - new, dry measure

TABLE 16 LENGTH FREQUENCIES - COD - 4V_B - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl	
	(Commercial)	
CATCHES/LANDINGS	Landings	NK
MONTH	July	March
COUNTRY	Canada (Maritimes)	Spain
TONNAGE	151-500	1200
33-35	12	1
36-38	24	1
39-41	42	14
42-44	109	32
45-47	158	26
48-50	158	67
51-53	133	93
54-56	124	188
57-59	55	173
60-62	52	127
63-65	30	104
66-68	21	89
69-71	24	46
72-74	12	14
75-77	18	6
78-80	6	8
81-83	9	-
84-86	3	5
87-89	-	3
90-92	6	3
93-95	3	-
Total ‰	999	1000
Serial Numbers	32	-
Number of Samples	1	3
Number of Fish Measured	330	654
Mean Length (cm)	52.4	-
Mean Weight (kg)	1.57	-
Total Weight Landed (tons)	-	-
Estimated Number Landed	-	-
Mesh(mm) or Hook(no.) Size	4 1/2 ¹	160 ²
Range of Depths (fm)	46-48	82

¹ Mesh size:- inches² Mesh size - new, dry measure

TABLE 17

LENGTH FREQUENCIES - COD - 4W - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl		Long-line	Gill-net
	(Commercial)			
CATCHES/LANDINGS	Landings			
MONTH	April	June	May	May
COUNTRY	Canada (Maritimes)			
TONNAGE	151-500		0-25	
36-38	-	-	8	-
39-41	-	-	23	7
42-44	-	-	15	2
45-47	8	6	90	14
48-50	48	28	90	36
51-53	64	40	128	125
54-56	121	68	150	229
57-59	121	74	173	253
60-62	57	85	181	168
63-65	105	79	75	87
66-68	40	90	15	24
69-71	72	85	8	19
72-74	32	68	-	14
75-77	16	62	15	-
78-80	49	57	7	10
81-83	33	52	15	2
84-86	49	35	-	5
87-89	83	47	7	-
90-92	25	42	-	-
93-95	42	35	-	-
96-98	17	18	-	-
99-101	-	12	-	-
102-104	-	6	-	2
105-107	8	-	-	-
108-110	-	6	-	-
111-113	-	6	-	2
114-116	-	-	-	-
117-119	-	-	-	-
120-122	-	-	-	-
123-125	-	-	-	-
126-128	8	-	-	-
Total ‰	998	1001	1000	999
Serial Numbers	33	34	35	36-37
Number of Samples	1	1	1	2
Number of Fish Measured	123	175	133	416
Mean Length (cm)	69.1	71.5	56.3	58.2
Mean Weight (kg)	3.58	3.16	1.83	1.95
Total Weight Landed (tons)	-	-	-	-
Estimated Number Landed	-	-	-	-
Mesh(mm) or Hook(no.) Size	4 5/8 ¹	4 1/2 ¹	16	5-6 ¹
Range of Depths (fm)	50-75	-	30	40

¹ Mesh size - inches

TABLE 18

LENGTH FREQUENCIES - COD - 4X - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Long-line	
	(Commercial)	
CATCHES/LANDINGS	Landings	
MONTH	April	May
COUNTRY	Canada (Maritimes)	
TONNAGE	26-50 & 51-150	
39-41	2	1
42-44	13	17
45-47	38	18
48-50	35	49
51-53	60	31
54-56	95	82
57-59	85	135
60-62	124	86
63-65	108	165
66-68	111	105
69-71	79	71
72-74	43	30
75-77	48	18
78-80	26	19
81-83	18	31
84-86	14	21
87-89	21	19
90-92	16	30
93-95	10	14
96-98	20	12
99-101	11	14
102-104	7	9
105-107	5	7
108-110	3	7
111-113	3	-
114-116	2	-
117-119	1	5
120-122	2	2
123-125	-	2
Total ‰	1000	1000
Serial Numbers	38-39	40
Number of Samples	2	1
Number of Fish Measured	604	318
Mean Length (cm)	66.1	66.9
Mean Weight (kg)	3.47	3.42
Total Weight Landed (tons)	-	-
Estimated Number Landed	-	-
Mesh(mm) or Hook(no.) Size	6/0	6/0
Range of Depths (fm)	50-65	-

TABLE 19

LENGTH FREQUENCIES - COD - 5Z - 1964

(FREQUENCIES IN ‰ - 3 CM GROUPS)

GEAR	Otter Trawl					
	(Commercial)					
CATCHES/LANDINGS	Landings					
MONTH	January	February	March	April	May	June
COUNTRY	United States					
TONNAGE	11-483					
39-41	3	-	-	2	-	-
42-44	31	13	-	7	7	-
45-47	39	11	20	18	36	26
48-50	103	14	58	28	88	67
51-53	149	32	87	29	76	94
54-56	164	20	164	16	77	68
57-59	128	43	135	58	53	104
60-62	98	45	73	54	54	95
63-65	86	68	44	61	55	78
66-68	32	47	30	102	50	56
69-71	52	66	42	110	76	82
72-74	60	78	51	153	64	47
75-77	22	63	37	120	67	76
78-80	15	94	46	85	51	40
81-83	4	97	52	32	72	48
84-86	5	99	59	40	52	16
87-89	1	69	37	29	37	22
90-92	1	49	33	11	36	23
93-95	2	21	9	19	15	22
96-98	1	21	10	4	9	19
99-101	1	25	6	4	5	5
102-104	2	14	6	1	3	8
105-107	1	10	-	-	5	-
108-110	1	-	-	2	8	-
111-113	-	-	-	4	3	-
114-116	-	-	-	4	-	3
Total ‰	1001	999	999	999	999	999
Serial Numbers	-	-	-	-	-	-
Number of Samples	7	3	7	7	10	9
Number of Fish Measured	672	254	588	594	869	786
Mean Length (cm)	58.67	75.77	66.16	71.07	71.56	66.76
Mean Weight (kg)	2.38	5.47	3.46	4.06	3.87	3.59
Total Weight Landed (tons)	538	765	810	1351	1191	1338
Estimated Number Landed	2261 ¹	1399 ¹	2341 ¹	3327 ¹	3078 ¹	3727 ¹
Mesh(mm) or Hook(no.) Size	4.5 ²	4.5 ²	4.5 ²	4.5 ²	4.5 ²	4.5 ²
Range of Depths (fm)	15-130	28-145	20-135	25-130	18-70	20-100

¹ Estimated number landed - hundreds² Mesh size - inches

TABLE 19
(cont'd)

LENGTH FREQUENCIES - COD - 5Z - 1964

(FREQUENCIES IN % - 3 CM GROUPS)

GEAR	Otter Trawl						
	(Commercial)						
CATCHES/LANDINGS	Landings						
MONTH	July	July	August	September	October	November	December
COUNTRY	Canada(M)	United States					
TONNAGE	151-500	11-483					
39-41	5	-	2	4	6	3	8
42-44	43	-	4	7	21	18	12
45-47	86	12	40	30	34	67	48
48-50	104	75	67	57	75	43	45
51-53	98	110	69	70	114	79	116
54-56	55	85	93	74	107	162	176
57-59	33	148	94	91	79	180	167
60-62	53	100	142	117	92	105	147
63-65	102	103	111	99	113	94	100
66-68	88	47	83	83	115	44	60
69-71	82	58	99	75	68	62	62
72-74	35	85	65	71	48	37	23
75-77	51	61	54	52	46	32	19
78-80	34	70	41	40	28	14	-
81-83	29	31	21	19	22	23	6
84-86	22	4	9	30	10	19	6
87-89	21	2	-	22	9	5	6
90-92	11	1	3	25	5	3	-
93-95	6	3	-	17	3	-	-
96-98	8	3	3	3	1	2	-
99-101	10	1	-	3	1	6	-
102-104	10	1	-	4	1	-	-
105-107	-	-	-	1	1	-	-
108-110	5	-	-	-	-	1	-
111-113	2	-	-	3	-	1	-
114-116	-	-	-	-	-	-	-
117-119	2	-	-	-	-	-	-
120-122	3	-	-	-	-	-	-
123-125	-	-	-	3	-	-	-
126-128	-	1	-	-	-	-	-
129-131	2	-	-	-	-	-	-
Total %/oo	1000	1001	1000	1000	999	1000	1001
Serial Numbers	41-42	-	-	-	-	-	-
Number of Samples	2	5	7	8	10	5	2
Number of Fish Measured	809	421	764	770	980	450	206
Mean Length (cm)	63.7	63.47	62.93	67.06	61.95	60.72	58.97
Mean Weight (kg)	4.45	2.95	2.89	3.39	2.81	2.66	2.29
Total Weight Landed (tons)	-	1215	1326	985	1204	1026	510
Estimated Number Landed	-	4119 ¹	4588 ¹	2906 ¹	4285 ¹	3857 ¹	2227 ¹
Mesh(mm) or Hook(no.) Size	4 3/8 ²	4.5 ²	4.5 ²	4.5 ²	4.5 ²	4.5 ²	4.5 ²
Range of Depths (fm)	-	23-90	18-100	18-127	20-120	11-110	25-40

¹ Estimated number landed - hundreds² Mesh size - inches

TABLE 20

AGE/LENGTH KEY - COD - 1B - 1964 (3rd QUARTER)

GEAR		Greenlanders' (Commercial)										
CATCHES OR LANDINGS		Catches										
COUNTRY		Denmark (Greenland)										
TONNAGE		small boats										
STRUCTURES USED IN AGE DETERMINATION		NK										
Length Group (3 cm)	Age	4	5	6	7	8	9	10	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
										Months Within Quarter	Jul	Aug
48	1	-	-	-	-	-	-	-	1			
51	20	-	-	-	-	-	-	-	20			
54	53	11	-	-	-	-	-	-	64			
57	41	23	1	-	-	-	-	-	65			
60	12	14	2	-	-	-	-	-	28			
63	1	11	3	2	-	-	-	-	17			
66	-	3	1	2	-	-	-	-	6			
69	-	1	2	2	-	-	-	-	5			
72	-	-	-	-	-	-	1	1	2			
75	-	2	-	1	-	-	-	-	3			
78	-	-	-	1	1	-	-	-	2			
81	-	-	-	-	1	-	-	-	1			
Total No. of Ages Read		128	65	9	8	2	1	1	214	X		
Serial Numbers		No. of Age Samples										
X		Number of fish measured each month								214		
		Mean length of fish (cm) each month								58.6		
		Mean weight of fish (kg) each month								2.6(culled)		
		Total weight caught or landed (tons) each month										
		Estimated number caught or landed (whole numbers) each month										
		Range of depths (m) each month								?		
Mesh size (mm)												

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 21

AGE/LENGTH KEY - COD - 1C - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research)											
CATCHES OR LANDINGS		NK											
COUNTRY		Norway											
TONNAGE		NK											
STRUCTURES USED IN AGE DETERMINATION		Otoliths											
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
											Months Within Quarter		
											Apr	May	Jun
39		1	-	-	-	-	-	-	-	1			
42		3	-	-	-	-	-	-	-	3			
45		12	1	-	-	-	-	-	-	13			
48		15	1	-	-	-	-	-	-	16			
51		10	7	2	-	-	-	-	-	19			
54		2	10	1	-	-	-	-	-	13			
57		2	20	4	1	-	-	-	-	27			
60		-	11	2	1	-	-	-	-	14			
63		1	7	11	2	-	-	-	-	21			
66		-	3	8	7	-	-	-	-	18			
69		-	-	4	9	2	-	-	-	15			
72		-	-	4	13	3	-	-	-	20			
75		-	-	3	2	2	1	-	-	8			
78		-	-	1	2	3	1	-	1	8			
81		-	-	-	1	3	-	-	-	4			
84		-	-	-	1	-	-	-	3	4			
87		-	-	-	-	-	1	-	-	1			
90		-	-	-	-	-	-	-	3	3			
93		-	-	-	-	1	-	-	-	1			
Total No. of Ages Read		46	60	40	39	14	3	-	7	209	X		
Serial Numbers		No. of Age Samples											
X		Number of fish measured each month									209		
		Mean length of fish (cm) each month									62.64		
		Mean weight of fish (kg) each month											
		Total weight caught or landed (tons) each month											
		Estimated number caught or landed (whole numbers) each month											
		Range of depths (m) each month											
Mesh size (mm)													

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 21
(cont'd)

AGE/LENGTH KEY - COD - 1C - 1964 (2nd QUARTER)

GEAR		Hand-line (Research)												
CATCHES OR LANDINGS		NK												
COUNTRY		Denmark (Greenland)												
TONNAGE		0-50 - m/c <i>Adolf Jensen</i> and m/b <i>Tornaaq</i>												
STRUCTURES USED IN AGE DETERMINATION		Otoliths												
Length Group (3 cm)	Age	3	4	5	6	7	8	9	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE				
										Months Within Quarter				
										Apr	May	Jun		
27		2	-	-	-	-	-	-	2					
30		10	-	-	-	-	-	-	10					
33		18	-	-	-	-	-	-	18					
36		20	5	-	-	-	-	-	25					
39		23	13	-	-	-	-	-	36					
42		7	35	1	-	-	-	-	43					
45		1	67	-	-	-	-	-	68					
48		-	56	-	-	-	-	-	56					
51		-	51	3	-	-	-	-	54					
54		-	22	8	-	-	-	-	30					
57		-	3	14	-	-	-	-	17					
60		-	-	5	-	1	-	-	6					
63		-	-	7	1	1	-	-	9					
66		-	-	2	5	1	-	-	8					
69		-	-	-	6	3	-	-	9					
72		-	-	1	-	-	-	-	1					
75		-	-	-	-	3	-	-	3					
78		-	-	-	-	1	-	-	1					
81		-	-	-	-	-	2	-	2					
84		-	-	-	-	1	-	-	1					
87		-	-	-	-	-	3	-	3					
90		-	-	-	-	1	-	-	1					
93		-	-	-	-	-	-	1	1					
Total No. of Ages Read		81	252	41	12	12	5	1	404	X				
Serial Numbers		No. of Age Samples												
X		Number of fish measured each month											155	249
		Mean length of fish (cm) each month											53.8	45.7
		Mean weight of fish (kg) each month											1.6	0.9
		Total weight caught or landed (tons) each month												
		Estimated number caught or landed (whole numbers) each month												
		Range of depths (m) each month											?	10-20
Mesh size (mm)														

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 21
(cont'd)

AGE/LENGTH KEY - COD - 1C - 1964 (4th QUARTER)

GEAR		Greenlanders' (Commercial)												
CATCHES OR LANDINGS		Catches												
COUNTRY		Denmark (Greenland)												
TONNAGE		0-50												
STRUCTURES USED IN AGE DETERMINATION		NK												
Length Group (3 cm)	Age	3	4	5	6	7	8	11	17	22	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
												Months Within Quarter		
												Oct	Nov	Dec
42		5	-	-	-	-	-	-	-	-	5			
45		10	9	-	-	-	-	-	-	-	19			
48		3	15	-	-	-	-	-	-	-	18			
51		-	12	-	-	1	-	-	-	-	13			
54		-	11	-	-	-	-	-	-	-	11			
57		-	14	5	-	-	-	-	-	-	19			
60		-	5	4	1	-	-	-	-	-	10			
63		-	-	5	-	-	-	-	-	-	5			
66		-	-	3	1	2	-	-	-	-	6			
69		-	-	2	3	1	-	-	-	-	6			
72		-	-	1	2	3	-	-	-	-	6			
75		-	-	1	1	1	-	-	-	-	3			
78		-	-	-	-	4	-	-	-	-	4			
81		-	-	-	-	2	-	-	-	-	2			
84		-	-	-	-	-	-	1	-	-	1			
87		-	-	-	-	1	-	-	-	-	1			
90		-	-	-	-	-	1	-	-	-	1			
93		-	-	-	-	-	-	-	-	-	-			
96		-	-	-	-	-	-	-	-	1	1			
99		-	-	-	-	-	-	-	-	-	-			
102		-	-	-	-	-	-	-	-	-	-			
105		-	-	-	-	-	-	-	1	-	1			
108		-	-	-	-	-	-	-	-	-	-			
111		-	-	-	-	-	-	-	-	-	-			
114		-	-	-	-	-	-	-	1	-	1			
Total No. of Ages Read		18	66	21	8	15	1	1	2	1	133	X		
Serial Numbers		No. of Age Samples												
X		Number of fish measured each month										133		
		Mean length of fish (cm) each month										58.5		
		Mean weight of fish (kg) each month										2.4		
		Total weight caught or landed (tons) each month												
		Estimated number caught or landed (whole numbers) each month												
		Range of depths (m) each month												
		Mesh size (mm)												

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 22

AGE/LENGTH KEY - COD - 1D - 1964 (1st QUARTER)

GEAR		Long-line (Research)																		
CATCHES OR LANDINGS		NK																		
COUNTRY		Denmark (Greenland)																		
TONNAGE		less than 50 - m/c <i>Adolf Jensen</i>																		
STRUCTURES USED IN AGE DETERMINATION		NK																		
Length Group (3 cm)	Age	3	4	5	6	7	8	9	10	11	12	13	14	15	17	19	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
																		Jan	Feb	Mar
36	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1				
39	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	3				
42	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	3				
45	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	3				
48	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	4				
51	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1				
54	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	3				
57	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1				
60	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1				
63	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	3				
66	-	-	-	1	2	1	1	-	-	-	-	-	-	-	-	5				
69	-	-	-	-	3	-	-	1	-	-	-	-	-	-	-	4				
72	-	-	-	-	3	2	2	-	-	-	-	-	-	-	-	7				
75	-	-	-	1	2	1	-	-	-	-	-	-	-	-	-	4				
78	-	-	-	-	-	2	5	-	-	-	-	-	-	-	-	7				
81	-	-	-	-	1	-	1	-	3	-	1	1	-	-	-	7				
84	-	-	-	-	-	-	1	1	-	-	-	2	-	1	-	5				
87	-	-	-	-	-	1	2	-	1	-	-	-	1	-	-	5				
90	-	-	-	-	-	-	-	-	1	1	-	-	-	-	1	3				
93	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1				
96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1				
99	-	-	-	-	-	-	-	-	-	2	-	1	-	-	-	3				
102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
111	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1				
Total No. of Ages Read		1	15	4	5	11	7	12	3	5	3	1	4	1	2	2	76	X		
Serial Numbers		No. of Age Samples																		
X	Number of fish measured each month																76			
	Mean length of fish (cm) each month																71.4			
	Mean weight of fish (kg) each month																4.3			
	Total weight caught or landed (tons) each month																			
	Estimated number caught or landed (whole numbers) each month																			
	Range of depths (m) each month																70-120			
Mesh size (mm)																				

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 22
(cont'd)

AGE/LENGTH KEY - COD - 1D - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research)															Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		NK																Months Within Quarter		
COUNTRY		Norway																		
TONNAGE		NK																		
STRUCTURES USED IN AGE DETERMINATION		Otoliths																		
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	12	13	14	15	16	17	21	Total No. of Ages Read	Months Within Quarter		
																		Apr		
39	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
42	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
45	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3			
48	17	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20			
51	15	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17			
54	15	10	2	1	-	-	-	-	-	-	-	-	-	-	-	-	28			
57	3	19	3	1	-	-	-	-	-	-	-	-	-	-	-	-	26			
60	2	11	9	1	-	-	-	-	-	-	-	-	-	-	-	-	23			
63	-	7	7	2	-	-	-	-	-	-	-	-	-	-	-	-	16			
66	-	7	10	5	-	-	-	-	-	-	-	-	-	-	-	-	22			
69	-	2	4	6	1	-	-	-	-	-	-	-	-	-	-	-	13			
72	-	-	4	9	1	-	-	-	-	-	-	-	-	-	-	-	14			
75	-	-	2	2	6	-	-	-	-	-	-	-	-	-	-	-	10			
78	-	-	1	4	3	1	-	-	-	-	-	-	-	-	-	-	9			
81	-	-	-	3	2	2	-	2	-	-	-	-	-	-	-	-	9			
84	-	-	-	-	2	3	-	2	-	-	1	-	-	-	-	-	8			
87	-	-	-	-	-	1	-	1	-	1	1	-	-	-	-	-	4			
90	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	2			
93	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1			
96	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2			
99	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	2			
102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1			
Total No. of Ages Read		55	63	42	34	15	7	-	10	-	1	3	-	-	1	1	232	X		
Serial Numbers		No. of Age Samples																		
X		Number of fish measured each month															232			
		Mean length of fish (cm) each month															64.58			
		Mean weight of fish (kg) each month																		
		Total weight caught or landed (tons) each month																		
		Estimated number caught or landed (whole numbers) each month																		
		Range of depths (m) each month																		
Mesh size (mm)																				

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 22
(cont'd)

AGE/LENGTH KEY - COD - 1D - 1964 (2nd QUARTER)

GEAR		Long-line (Research)													Total	LENGTH COMPOSITION PER MILLE				
CATCHES OR LANDINGS		NK													No. of	Months Within Quarter				
COUNTRY		Denmark (Greenland)													Ages	Apr			May	Jun
TONNAGE		Less than 50 - m/c Adolf Jensen													Read					
STRUCTURES USED IN AGE DETERMINATION		NK																		
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	12	14	16	17	18	Total No. of Ages Read	Months Within Quarter				
																Apr	May	Jun		
42		1	-	-	-	-	-	-	-	-	-	-	-	1						
45		3	-	-	-	-	-	-	-	-	-	-	-	3						
48		3	-	-	-	-	-	-	-	-	-	-	-	3						
51		4	-	-	-	-	-	-	-	-	-	-	-	4						
54		3	1	-	-	-	-	-	-	-	-	-	-	4						
57		-	2	-	-	-	-	-	-	-	-	-	-	2						
60		-	1	2	1	-	-	-	-	-	-	-	-	4						
63		-	2	1	2	-	-	-	-	-	-	-	-	5						
66		-	-	2	14	-	-	-	-	-	-	-	-	16						
69		-	-	2	12	-	-	-	-	-	-	-	-	14						
72		-	-	2	8	-	-	-	-	-	-	-	-	10						
75		-	-	-	9	1	1	-	1	-	-	-	-	12						
78		-	-	-	9	1	1	-	1	-	-	-	-	12						
81		-	-	-	3	1	3	2	6	-	-	-	-	15						
84		-	-	-	-	-	-	1	1	-	1	-	-	3						
87		-	-	-	1	1	1	1	5	1	1	-	-	11						
90		-	-	-	-	-	-	-	1	-	-	1	-	2						
93		-	-	-	-	-	-	-	-	-	-	-	-	-						
96		-	-	-	-	-	-	-	-	-	-	-	-	-						
99		-	-	-	-	-	-	-	-	-	-	-	1	1						
Total No. of Ages Read		14	6	9	59	4	6	4	15	1	1	1	1	1	122	X				
Serial Numbers		No. of Age Samples																		
X	Number of fish measured each month														122					
	Mean length of fish (cm) each month														72.3					
	Mean weight of fish (kg) each month														3.2					
	Total weight caught or landed (tons) each month																			
	Estimated number caught or landed (whole numbers) each month																			
	Range of depths (m) each month														175-300					
Mesh size (mm)																				

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 22
(cont'd)

AGE/LENGTH KEY - COD - 1D - 1964 (2nd QUARTER)

GEAR		Long-line (Research)																Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		NK																	Months Within Quarter		
COUNTRY		Norway																			
TONNAGE		NK																			
STRUCTURES USED IN AGE DETERMINATION		Otoliths																			
Length Group (3 cm)	Age	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total No. of Ages Read			
																			Apr	May	
42	-	7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8			
45	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15			
48	1	26	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31			
51	-	44	14	-	1	-	-	-	-	-	-	-	-	-	-	-	-	59			
54	-	22	30	5	1	-	-	-	-	-	-	-	-	-	-	-	-	58			
57	-	5	47	8	3	-	-	-	-	-	-	-	-	-	-	-	-	63			
60	-	-	44	9	4	-	1	-	-	-	-	-	-	-	-	-	-	58			
63	-	-	22	26	21	2	-	-	-	-	-	-	-	-	-	-	-	71			
66	-	-	12	46	47	3	-	-	-	-	-	-	-	-	-	-	-	108			
69	-	-	3	23	84	3	1	-	-	-	-	-	-	-	-	-	-	114			
72	-	-	2	13	74	5	1	-	1	-	-	-	-	-	-	-	-	96			
75	-	-	-	7	59	17	4	2	-	1	-	-	-	-	-	-	-	90			
78	-	-	-	5	39	20	5	2	3	-	1	-	-	-	-	-	-	75			
81	-	-	-	-	15	11	5	3	9	1	1	-	-	-	-	-	-	45			
84	-	-	-	-	3	9	11	2	19	2	1	1	1	1	-	1	-	50			
87	-	-	-	-	1	3	8	2	5	1	-	2	-	-	-	-	-	22			
90	-	-	-	-	-	1	-	8	16	6	-	-	-	1	-	-	-	32			
93	-	-	-	-	-	-	2	2	10	6	-	1	-	-	-	-	-	21			
96	-	-	-	-	-	-	1	1	7	1	2	-	-	-	-	-	-	12			
99	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	3			
102	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	2			
105	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1			
108	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	2			
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1			
Total No. of Ages Read		1	119	179	142	352	74	39	22	72	20	7	5	1	1	2	1	1037	X		
Serial Numbers		No. of Age Samples																			
X		Number of fish measured each month																523	514		
		Mean length of fish (cm) each month																67.05	72.60		
		Mean weight of fish (kg) each month																			
		Total weight caught or landed (tons) each month																			
		Estimated number caught or landed (whole numbers) each month																			
		Range of depths (m) each month																			
		Mesh size (mm)																			

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 23

AGE/LENGTH KEY - COD - 1E - 1964 (2nd QUARTER)

GEAR		Long-line (Research)																						
CATCHES OR LANDINGS		NK																						
COUNTRY		Norway																						
TONNAGE		NK																						
STRUCTURES USED IN AGE DETERMINATION		Otoliths																						
Length Group (3 cm)	Age	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	20	21	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE				
																				Months Within Quarter				
																	Apr	May						
33	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1					
36	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1					
39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
42	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4					
45	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3					
48	1	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10					
51	1	12	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19					
54	-	13	12	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26					
57	-	4	22	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	32					
60	-	2	12	16	4	-	-	-	-	-	-	-	-	-	-	-	-	-	34					
63	-	-	14	21	13	-	-	-	-	-	-	-	-	-	-	-	-	-	48					
66	-	2	5	30	19	-	-	-	-	-	-	-	-	-	-	-	-	-	56					
69	-	-	3	13	23	3	-	-	-	-	-	-	-	-	-	-	-	-	42					
72	-	-	-	11	20	3	1	1	-	-	-	-	-	-	-	-	-	-	36					
75	-	-	-	1	24	4	1	-	-	-	-	1	-	-	-	-	-	-	31					
78	-	-	-	3	10	4	1	2	1	1	-	-	-	-	-	-	-	-	22					
81	-	-	-	-	8	4	4	2	4	-	-	-	-	-	-	-	-	-	22					
84	-	-	-	2	2	4	2	2	6	-	-	1	-	-	1	-	-	-	20					
87	-	-	-	-	-	2	-	-	4	1	-	2	-	-	-	-	-	-	9					
90	-	-	-	1	-	-	1	1	4	-	2	1	-	-	-	-	-	-	10					
93	-	-	-	-	-	1	-	2	-	-	-	3	-	-	2	-	-	-	8					
96	-	-	-	-	-	-	-	-	2	1	-	1	1	1	-	-	-	-	6					
99	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	3					
102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
111	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1					
Total No. of Ages Read		6	46	73	105	125	25	11	10	21	3	2	9	1	2	3	1	1	444	X				
Serial Numbers																			No. of Age Samples	3	X			
X		Number of fish measured each month																	326	118				
		Mean length of fish (cm) each month																	65.12	79.53				
		Mean weight of fish (kg) each month																						
		Total weight caught or landed (tons) each month																						
		Estimated number caught or landed (whole numbers) each month																						
		Range of depths (m) each month																						
X		Mesh size (mm)																						

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 23
(cont'd)

AGE/LENGTH KEY - COD - 1E - 1964 (2nd QUARTER)

GEAR		Greenlanders' (Research)												
CATCHES OR LANDINGS		Catches												
COUNTRY		Denmark (Greenland)												
TONNAGE		small boat												
STRUCTURES USED IN AGE DETERMINATION		NK												
Length Group (3 cm)	Age	5	6	7	8	9	10	11	13	14	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
												Months Within Quarter	Apr	May
48		1	-	-	-	-	-	-	-	-	1			
51		-	-	-	-	-	-	-	-	-	-			
54		-	4	-	1	-	-	-	-	-	5			
57		-	6	-	-	-	-	-	-	-	6			
60		-	6	5	3	-	-	2	-	-	16			
63		-	2	1	8	-	-	-	-	1	12			
66		-	1	3	8	1	-	2	-	-	15			
69		-	1	1	7	-	-	2	-	-	11			
72		-	-	-	6	-	-	7	-	-	13			
75		-	-	1	5	-	1	3	-	-	10			
78		-	-	-	4	-	1	3	1	-	9			
81		-	-	-	1	1	-	1	-	-	3			
84		-	-	-	-	-	1	3	-	-	4			
87		-	-	-	2	-	-	-	-	-	2			
90		-	-	-	-	-	-	-	-	-	-			
93		-	-	-	-	-	-	-	-	1	1			
Total No. of Ages Read		1	20	11	45	2	3	23	1	2	108	X		
Serial Numbers		No. of Age Samples												
X	Number of fish measured each month											108		
	Mean length of fish (cm) each month											67.3		
	Mean weight of fish (kg) each month											2.9		
	Total weight caught or landed (tons) each month													
	Estimated number caught or landed (whole numbers) each month													
	Range of depths (m) each month											?		
	Mesh size (mm)													

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 24

AGE/LENGTH KEY - COD - 1F - 1964 (2nd QUARTER)

GEAR		Greenlanders ¹ (Research)												Total		LENGTH COMPOSITION		
CATCHES OR LANDINGS		Catches												No. of		PER MILLE		
COUNTRY		Denmark (Greenland)												Ages		Months Within Quarter		
TONNAGE		NK												Read		Apr May Jun		
STRUCTURES USED IN AGE DETERMINATION		NK																
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	14	15	17	19	Total	PER MILLE			
																Apr	May	Jun
42	-	2	-	-	-	-	-	-	-	-	-	-	-	2				
45	6	1	-	-	-	-	-	-	-	-	-	-	-	7				
48	6	7	3	-	-	-	-	-	-	-	-	-	-	16				
51	2	5	11	1	1	-	-	-	-	-	-	-	-	20				
54	5	15	27	3	-	-	-	-	-	-	-	-	-	50				
57	-	15	23	4	1	-	-	-	-	-	-	-	-	43				
60	2	6	31	2	3	-	1	-	-	-	-	-	-	45				
63	-	3	7	5	3	1	-	-	-	-	-	-	-	19				
66	-	-	9	8	10	1	2	-	-	-	-	-	-	30				
69	-	-	4	10	26	1	-	-	-	-	-	-	-	41				
72	-	-	2	6	35	-	-	-	-	-	-	1	-	44				
75	-	-	1	6	43	-	-	3	-	-	-	-	-	53				
78	-	-	-	2	55	2	-	3	3	-	1	-	-	66				
81	-	-	-	1	41	4	-	3	3	-	4	-	-	56				
84	-	-	-	-	13	5	-	1	-	1	1	-	-	21				
87	-	-	-	-	5	1	1	2	-	-	1	1	-	11				
90	-	-	-	-	1	-	-	-	-	-	-	-	-	1				
93	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
96	-	-	-	-	-	-	-	-	1	-	-	-	-	1				
Total No. of Ages Read		21	54	118	48	237	15	4	12	7	1	8	1	526	X			
Serial Numbers		No. of Age Samples																
X	Number of fish measured each month														327	199		
	Mean length of fish (cm) each month														71.2	63.6		
	Mean weight of fish (kg) each month														2.7	2.5		
	Total weight caught or landed (tons) each month																	
	Estimated number caught or landed (whole numbers) each month																	
	Range of depths (m) each month																	
Mesh size (mm)														?	?			

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 24
(cont'd)

AGE/LENGTH KEY - COD - 1F - 1964 (3rd QUARTER)

GEAR		Greenlanders' (Research)													Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		Catches														Months Within Quarter	Jul	Aug
COUNTRY		Denmark (Greenland)																
TONNAGE		NK																
STRUCTURES USED IN AGE DETERMINATION		NK																
Length Group (3 cm)	Age	3	4	5	6	7	8	9	10	11	14	17	19	21	Total No. of Ages Read	Months Within Quarter		
																	Jul	Aug
27	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1			
30	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2			
33	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2			
36	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2			
39	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1			
42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
48	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1			
51	--	--	--	--	2	--	--	--	--	--	--	--	--	--	2			
54	--	--	4	6	--	--	--	--	--	--	--	--	--	--	10			
57	--	--	3	18	--	--	--	--	--	--	--	--	--	--	21			
60	--	--	1	33	2	1	--	1	--	--	--	--	--	--	38			
63	--	--	1	32	10	2	--	--	1	--	--	--	--	--	46			
66	--	--	3	25	16	10	1	1	--	--	--	--	--	--	56			
69	--	--	--	9	11	12	--	--	2	--	--	--	--	--	34			
72	--	--	--	3	9	20	1	--	1	--	--	--	--	--	34			
75	--	--	--	--	4	17	--	--	2	--	3	--	--	--	26			
78	--	--	--	1	3	22	1	--	2	--	--	1	--	--	30			
81	--	--	--	--	2	14	--	--	--	--	--	--	--	--	16			
84	--	--	--	--	--	12	--	--	1	1	--	--	--	--	14			
87	--	--	--	--	--	4	--	--	--	1	1	--	--	--	6			
90	--	--	--	--	--	--	--	--	1	1	--	--	--	1	3			
93	--	--	--	--	--	1	--	--	--	--	1	--	--	--	2			
96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
99	--	--	--	--	--	1	--	--	1	--	--	--	--	--	2			
102	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
105	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
108	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
111	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
114	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1			
Total No. of Ages Read		7	1	12	130	57	116	3	2	12	3	5	1	1	350	X		
Serial Numbers		No. of Age Samples 2																
X		Number of fish measured each month													350			
		Mean length of fish (cm) each month													69.1			
		Mean weight of fish (kg) each month													?			
		Total weight caught or landed (tons) each month																
		Estimated number caught or landed (whole numbers) each month																
		Range of depths (m) each month													?			
		Mesh size (mm)																

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 24
(cont'd)

AGE/LENGTH KEY - COD - 1F - 1964 (4th QUARTER)

GEAR		Greenlanders' (Research)																		
CATCHES OR LANDINGS		Catches																		
COUNTRY		Denmark (Greenland)																		
TONNAGE		NK																		
STRUCTURES USED IN AGE DETERMINATION		NK																		
Length Group (3 cm)	Age	6	7	8	9	10	11	12	13	14	15	16	17	18	19	22	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
																		Months Within Quarter		
															Oct	Nov	Dec			
60		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1			
63		-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	3			
66		2	3	1	-	-	1	-	-	1	-	-	2	-	-	-	10			
69		1	6	6	-	1	1	-	-	-	-	3	-	-	-	-	18			
72		-	3	10	-	-	-	1	-	3	1	-	7	-	-	-	25			
75		-	3	8	1	2	2	1	1	2	1	1	9	-	-	-	31			
78		-	2	8	-	2	4	-	2	3	2	1	18	1	1	-	44			
81		-	-	4	2	2	3	-	1	1	-	3	12	-	-	-	28			
84		-	-	1	-	-	3	-	1	2	-	-	11	1	-	1	20			
87		-	-	-	-	1	1	-	2	1	1	-	5	-	-	-	11			
90		-	-	-	-	-	1	-	-	1	-	1	1	-	-	1	5			
93		-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1			
96		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
99		-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1			
Total No. of Ages Read		4	20	38	3	8	16	2	7	14	5	6	70	2	1	2	198	X		
Serial Numbers		No. of Age Samples																		
X	Number of fish measured each month																198			
	Mean length of fish (cm) each month																77.7			
	Mean weight of fish (kg) each month																4.7			
	Total weight caught or landed (tons) each month																			
	Estimated number caught or landed (whole numbers) each month																			
	Range of depths (m) each month																?			
Mesh size (mm)																				

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 25

AGE/LENGTH KEY - COD - 2J - 1964 (3rd QUARTER)

GEAR		Otter Trawl (Research)												Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		Catches													Months Within Quarter		
COUNTRY		Iceland															
TONNAGE		491															
STRUCTURES USED IN AGE DETERMINATION		Otoliths															
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	12	13	14	NK	Total No. of Ages Read	Months Within Quarter		
																July	
42	-	3	-	-	-	-	-	-	-	-	-	-	-	3			
45	-	7	1	-	-	-	-	-	-	-	-	-	-	8			
48	-	11	7	5	-	-	-	-	-	-	-	-	-	23			
51	1	6	8	23	8	-	-	-	-	-	-	-	1	46			
54	-	1	9	27	15	1	-	-	-	-	-	-	-	53			
57	-	-	4	20	24	4	-	-	1	-	-	-	2	53			
60	-	-	6	12	17	5	1	-	-	-	-	-	-	41			
63	-	-	2	1	3	4	-	-	-	-	1	1	1	11			
66	-	-	-	1	4	5	1	-	1	-	-	-	-	12			
69	-	-	-	-	-	1	1	-	-	-	-	-	-	2			
72	-	-	-	1	-	1	-	-	-	1	-	-	-	3			
75	-	-	-	-	-	-	1	-	-	-	-	-	-	1			
78	-	-	-	-	-	-	-	-	-	-	1	-	-	1			
Total No. of Ages Read		1	28	37	90	71	21	4	-	2	1	2	5	257	X		
Serial Numbers	No. of Age Samples 2																
X		Number of fish measured each month												257			
		Mean length of fish (cm) each month												56.5			
		Mean weight of fish (kg) each month															
		Total weight caught or landed (tons) each month															
		Estimated number caught or landed (whole numbers) each month															
		Range of depths (m) each month															
Mesh size (mm)												(synthetic)	110				

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 26

AGE/LENGTH KEY - COD - 3K - 1964 (3rd QUARTER)

GEAR		Otter Trawl (Research)												Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		NK													Months Within Quarter	July	
COUNTRY		Iceland															
TONNAGE		491															
STRUCTURES USED IN AGE DETERMINATION		Otoliths															
Length Group (3 cm)	Age	2	3	4	5	6	7	8	9	10	13	16	NK	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
21		1	-	-	-	-	-	-	-	-	-	-	-	1			
24		-	-	-	-	-	-	-	-	-	-	-	-	-			
27		-	3	-	-	-	-	-	-	-	-	-	-	1	3		
30		-	6	1	-	-	-	-	-	-	-	-	-	-	7		
33		-	8	5	-	-	-	-	-	-	-	-	-	-	13		
36		-	8	9	-	-	-	-	-	-	-	-	-	-	17		
39		-	5	4	5	-	-	-	-	-	-	-	-	1	14		
42		-	1	7	13	4	2	-	-	-	-	-	-	1	27		
45		-	-	5	12	4	4	-	-	-	-	-	-	1	25		
48		-	-	-	17	8	3	1	-	-	-	-	-	1	29		
51		-	-	2	5	9	12	7	-	-	-	-	-	2	35		
54		-	-	2	5	10	29	2	-	-	-	-	-	3	48		
57		-	-	-	4	5	12	5	-	-	-	-	-	1	26		
60		-	-	-	1	7	11	5	2	-	-	-	-	1	26		
63		-	-	-	-	2	5	5	2	-	-	-	-	-	14		
66		-	-	-	-	-	3	3	3	1	1	-	-	1	11		
69		-	-	-	-	-	4	-	-	1	-	-	-	-	5		
72		-	-	-	-	1	-	-	-	-	-	-	-	-	1		
75		-	-	-	-	1	1	2	1	-	-	-	-	1	5		
78		-	-	-	-	-	-	-	1	-	-	-	-	-	1		
81		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
84		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
87		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
90		-	-	-	-	-	-	-	-	1	-	-	-	-	1		
93		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
96		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
99		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
102		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
105		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
108		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
111		-	-	-	-	-	-	-	-	-	-	1	-	-	1		
Total No. of Ages Read		1	31	35	62	51	86	30	9	3	1	1	14	310			
Serial Numbers		No. of Age Samples												2			
		Number of fish measured each month													310		
		Mean length of fish (cm) each month													51.6		
		Mean weight of fish (kg) each month															
		Total weight caught or landed (tons) each month															
		Estimated number caught or landed (whole numbers) each month															
		Range of depths (m) each month															
		Mesh size (mm)												(synthetic)	110		

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	Total

TABLE 27

AGE/LENGTH TABLE - COD - 1B - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research)															
CATCHES OR LANDINGS		Catches															
COUNTRY		Germany, Fed. Rep.															
TONNAGE		1987															
STRUCTURES USED IN AGE DETERMINATION		Otoliths															
Length Group (3 cm)	Age	3	4	5	6	7	8	9	10	11	12	14	17	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
															Months Within Quarter	Apr	May
33		2	-	-	-	-	-	-	-	-	-	-	-	2	-	-	5
36		2	1	-	-	-	-	-	-	-	-	-	-	3	-	-	7
39		4	10	-	-	-	-	-	-	-	-	-	-	14	-	-	35
42		3	24	-	-	-	-	-	-	-	-	-	-	27	-	-	64
45		-	37	2	1	-	-	-	-	-	-	-	-	40	-	-	94
48		-	49	5	2	1	-	-	-	-	-	-	-	57	-	-	142
51		-	22	3	1	1	-	-	-	-	-	-	-	27	-	-	71
54		-	9	7	1	1	-	-	-	-	-	-	-	18	-	-	45
57		-	1	9	2	2	-	-	-	-	-	-	-	14	-	-	33
60		-	-	11	5	3	-	-	-	-	-	-	-	19	-	-	47
63		-	-	12	7	7	-	-	-	-	-	-	-	26	-	-	64
66		-	-	3	3	13	-	1	-	-	-	-	-	20	-	-	50
69		-	-	1	6	21	1	-	-	-	-	-	-	29	-	-	71
72		-	-	-	1	23	2	-	-	-	-	-	-	26	-	-	73
75		-	-	-	2	20	2	1	-	-	-	-	-	25	-	-	64
78		-	-	-	-	5	6	1	-	-	-	-	-	12	-	-	31
81		-	-	-	-	4	4	2	-	-	-	-	-	10	-	-	24
84		-	-	-	-	2	1	-	1	-	-	-	-	4	-	-	16
87		-	-	-	-	-	-	2	1	5	-	2	-	10	-	-	26
90		-	-	-	-	-	1	2	1	2	1	-	-	7	-	-	19
93		-	-	-	-	-	-	1	-	2	2	-	-	5	-	-	12
96		-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	2
99		-	-	-	-	-	-	-	-	-	-	1	1	2	-	-	5
Total No. of Ages Read		11	153	53	31	103	17	11	2	10	3	3	1	398	1000		
Serial Numbers 157, 161, 167		No. of Age Samples 2															
X		Number of fish measured each month												-	-	423	
		Mean length of fish (cm) each month												-	-	61.5	
		Mean weight of fish (kg) each month												-	-	-	
		Total weight caught or landed (tons) each month												-	-	1.3	
		Estimated number caught or landed (whole numbers) each month												-	-	606	
		Range of depths (m) each month												-	-	90-190	
		Mesh size (mm)												-	-	110	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	10	11	12	14	17	Total
Apr	-	-	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-	-	-
Jun	26	377	132	78	260	50	26	5	28	8	8	2	1000

TABLE 27
(cont'd)

AGE/LENGTH TABLE - COD - 1B - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research)												
CATCHES OR LANDINGS		NK												
COUNTRY		Denmark (Greenland)												
TONNAGE		901-1800 - m/s <i>Skalaberg</i>												
STRUCTURES USED IN AGE DETERMINATION		NK												
Length Group (3 cm)	Age	4	5	6	7	9	11	12	13	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
											Months Within Quarter			
											Apr	May	Jun	
39	-	-	-	-	-	-	-	-	-	-	-	-	-	1
42	-	-	-	-	-	-	-	-	-	-	-	-	-	17
45	13	-	-	-	-	-	-	-	-	13	-	-	-	85
48	26	-	-	-	-	-	-	-	-	26	-	-	-	178
51	19	2	-	-	-	-	-	-	-	21	-	-	-	154
54	9	5	-	-	-	-	-	-	-	14	-	-	-	93
57	3	15	-	1	-	-	1?	-	-	20	-	-	-	71
60	-	11	3	-	-	-	-	-	-	14	-	-	-	60
63	-	5	1	2	-	-	-	-	-	8	-	-	-	56
66	-	3	-	1	-	-	-	-	-	4	-	-	-	47
69	-	-	2	8	-	-	-	-	-	10	-	-	-	55
72	-	-	1	5	-	-	-	-	-	6	-	-	-	51
75	-	-	-	3	1	-	-	-	-	4	-	-	-	35
78	-	-	1	1	-	-	-	-	-	2	-	-	-	24
81	-	-	-	-	-	-	1	-	-	1	-	-	-	19
84	-	-	-	-	-	-	-	-	-	-	-	-	-	16
87	-	-	-	-	-	-	2	-	-	2	-	-	-	15
90	-	-	-	-	-	-	-	1	1	2	-	-	-	10
93	-	-	-	-	2	-	-	-	-	2	-	-	-	5
96	-	-	-	-	-	-	-	-	-	-	-	-	-	3
99	-	-	-	-	-	-	-	-	-	-	-	-	-	1
102	-	-	-	-	-	-	1	-	-	1	-	-	-	2
Total No. of Ages Read		70	41	8	21	3	5	1	1	150	998			
Serial Numbers		No. of Age Samples												
X		Number of fish measured each month										-	-	4013
		Mean length of fish (cm) each month										-	-	59.5
		Mean weight of fish (kg) each month										-	-	-
		Total weight caught or landed (tons) each month										-	-	-
		Estimated number caught or landed (whole numbers) each month										-	-	-
		Range of depths (m) each month										-	-	130
		Mesh size (mm)										-	-	-

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	4	5	6	7	9	11	12	13	Total
Apr	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-
Jun	473	218	52	154	14	40	5	5	961

TABLE 27
(cont'd)

AGE/LENGTH TABLE - COD - 1B - 1964 (3rd QUARTER)

GEAR		Hand-line (Research)									
CATCHES OR LANDINGS		NK									
COUNTRY		Denmark (Greenland)									
TONNAGE		151-500 - m/s Dana									
STRUCTURES USED IN AGE DETERMINATION		NK									
Length Group (3 cm)	Age	3	4	5	6	7	8	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
									Months Within Quarter		
									Jul	Aug	Sep
30	-	-	-	-	-	-	-	-	2	-	-
33	6	1	-	-	-	-	-	7	32	-	-
36	7	2	-	-	-	-	-	9	53	-	-
39	-	5	-	-	-	-	-	5	48	-	-
42	1	14	-	-	-	-	-	15	103	-	-
45	1	26	1	-	-	-	-	28	187	-	-
48	-	30	-	-	-	-	-	30	231	-	-
51	-	9	1	-	-	-	-	10	120	-	-
54	-	5	3	-	-	-	-	8	78	-	-
57	-	-	3	-	-	-	-	3	32	-	-
60	-	-	3	1	-	-	-	4	23	-	-
63	-	-	1	-	-	-	-	1	11	-	-
66	-	-	-	2	-	-	-	2	13	-	-
69	-	-	-	2	-	-	-	2	15	-	-
72	-	-	-	1	1	-	-	2	15	-	-
75	-	-	-	-	2	-	-	2	17	-	-
78	-	-	-	-	-	-	-	-	6	-	-
81	-	-	-	-	-	-	-	-	6	-	-
84	-	-	-	-	-	-	1	1	6	-	-
87	-	-	-	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	-	-	-
93	-	-	-	-	-	-	-	-	-	-	-
96	-	-	-	-	-	-	-	-	2	-	-
99	-	-	-	-	-	-	-	-	-	-	-
102	-	-	-	-	-	-	-	-	-	-	-
105	-	-	-	-	-	-	-	-	2	-	-
Total No. of Ages Read		15	92	12	6	3	1	129	1002	-	-
Serial Numbers	No. of Age Samples										
X	Number of fish measured each month								476	-	-
	Mean length of fish (cm) each month								50.0	-	-
	Mean weight of fish (kg) each month								-	-	-
	Total weight caught or landed (tons) each month								-	-	-
	Estimated number caught or landed (whole numbers) each month								-	-	-
	Range of depths (m) each month								40-70	-	-
Mesh size (mm)								-	-	-	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	Total
Jul	82	723	108	41	24	6	984
Aug	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-

TABLE 27
(cont'd)

AGE/LENGTH TABLE - COD - 1B - 1964 (4th QUARTER)

GEAR		Otter Trawl (Research)										
CATCHES OR LANDINGS		Catches										
COUNTRY		Germany, Fed. Rep.										
TONNAGE		1967										
STRUCTURES USED IN AGE DETERMINATION		Otoliths										
Length Group (3 cm)	Age	3	4	5	6	7	8	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
									Months Within Quarter			
									Oct	Nov	Dec	
36		2	-	-	-	-	-	2	-	4	-	
39		10	1	-	-	-	-	11	-	66	-	
42		5	4	-	-	-	-	9	-	60	-	
45		5	13	-	-	-	-	18	-	92	-	
48		1	21	-	1	-	-	23	-	119	-	
51		1	33	-	-	-	-	34	-	194	-	
54		-	27	1	-	-	-	28	-	166	-	
57		1	27	-	-	-	-	28	-	139	-	
60		-	7	-	-	-	-	7	-	62	-	
63		-	3	1	-	-	-	4	-	30	-	
66		-	1	-	-	-	-	1	-	2	-	
69		-	-	-	-	1	-	1	-	13	-	
72		-	-	1	1	1	-	3	-	11	-	
75		-	-	-	-	3	-	3	-	17	-	
78		-	-	-	-	3	-	3	-	11	-	
81		-	-	-	-	-	1	1	-	4	-	
84		-	-	-	-	-	-	-	-	6	-	
87		-	-	-	-	-	-	-	-	2	-	
90		-	-	-	-	-	-	-	-	-	-	
93		-	-	-	-	-	-	-	-	2	-	
									-	1000	-	
Total No. of Ages Read		25	137	3	2	8	1	176	X			
Serial Numbers	452, 453								No. of Age Samples	1		
X		Number of fish measured each month							-	469	-	
		Mean length of fish (cm) each month							-	54.1	-	
		Mean weight of fish (kg) each month							-	-	-	
		Total weight caught or landed (tons) each month							-	7.5	-	
		Estimated number caught or landed (whole numbers) each month							-	5181	-	
		Range of depths (m) each month							-	160-225	-	
		Mesh size (mm)							-	110	-	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	Total
Oct	-	-	-	-	-	-	-
Nov	138	778	17	9	44	14	1000
Dec	-	-	-	-	-	-	-

TABLE 28

AGE/LENGTH TABLE - COD - 1C - 1964 (1st QUARTER)

GEAR		Otter Trawl (Research, Exploratory)									
CATCHES OR LANDINGS		Catches									
COUNTRY		USSR									
TONNAGE		1800									
STRUCTURES USED IN AGE DETERMINATION		Otoliths									
Length Group (3 cm)	Age	3	4	5	6	7	8	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
									Months Within Quarter		
									Jan	Feb	Mar
27		-	-	-	-	-	-	-	1	-	-
30		4	1	-	-	-	-	5	2	-	9
33		8	3	-	-	-	-	11	6	-	38
36		17	24	-	-	-	-	41	19	-	115
39		3	67	-	-	-	-	70	88	-	126
42		1	105	-	-	-	-	106	106	-	206
45		-	128	1	-	-	-	129	126	-	268
48		-	60	4	-	-	-	64	92	-	115
51		-	30	13	1	-	-	44	62	-	51
54		-	2	14	2	-	-	18	79	-	28
57		-	3	19	1	-	-	23	68	-	28
60		-	-	8	4	1	-	13	74	-	9
63		-	-	7	5	5	-	17	70	-	9
66		-	-	1	4	11	-	16	66	-	4
69		-	-	-	1	14	-	15	65	-	2
72		-	-	-	-	8	-	8	32	-	2
75		-	-	-	-	7	-	7	22	-	-
78		-	-	-	-	10	1	11	11	-	-
81		-	-	-	-	1	-	1	4	-	-
84		-	-	-	-	-	-	-	4	-	-
87		-	-	-	-	-	-	-	2	-	-
90		-	-	-	-	-	-	-	1	-	-
Total No. of Ages Read		33	432	67	18	57	1	599	1000	-	1010
Serial Numbers		No. of Age Samples 2									
X		Number of fish measured each month							9426	-	2036
		Mean length of fish (cm) each month							54.73	-	44.86
		Mean weight of fish (kg) each month							1.5	-	0.8
		Total weight caught or landed (tons) each month							-	-	-
		Estimated number caught or landed (whole numbers) each month							-	-	-
		Range of depths (m) each month							70-130	-	80-125
		Mesh size (mm)							110	-	110

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	Total
Jan	19	473	221	78	201	1	993
Feb	-	-	-	-	-	-	-
Mar	90	820	79	12	11	0	1012

TABLE 28
(cont'd)

AGE/LENGTH TABLE - COD - 1C - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research)												
CATCHES OR LANDINGS		Catches												
COUNTRY		Germany, Fed. Rep.												
TONNAGE		1987												
STRUCTURES USED IN AGE DETERMINATION		Otoliths												
Length Group (3 cm)	Age	3	4	5	6	7	8	9	11	14	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
												Months Within Quarter		
												Apr	May	Jun
33		2	-	-	-	-	-	-	-	-	2	-	-	10
36		-	1	-	-	-	-	-	-	-	1	-	-	7
39		3	5	-	-	-	-	-	-	-	8	-	-	42
42		1	8	-	-	-	-	-	-	-	9	-	-	52
45		1	35	-	-	-	-	-	-	-	36	-	-	145
48		-	41	4	-	-	-	-	-	-	45	-	-	184
51		-	29	4	1	1	-	-	-	-	35	-	-	142
54		-	10	2	-	1	-	-	-	-	13	-	-	48
57		-	2	5	3	-	-	-	-	-	10	-	-	42
60		-	2	6	2	-	-	-	-	-	10	-	-	45
63		-	-	3	2	2	-	-	-	-	7	-	-	31
66		-	-	2	5	1	-	-	-	-	8	-	-	27
69		-	-	-	3	6	1	-	-	-	10	-	-	35
72		-	-	-	3	6	-	-	-	-	9	-	-	31
75		-	-	-	1	1	4	1	1	-	8	-	-	38
78		-	-	-	-	5	-	-	1	-	6	-	-	24
81		-	-	-	-	1	3	1	2	-	7	-	-	28
84		-	-	-	-	-	3	2	4	1	10	-	-	42
87		-	-	-	-	-	-	-	1	1	2	-	-	17
90		-	-	-	-	-	-	-	1	1	2	-	-	7
93		-	-	-	-	-	-	1	-	-	1	-	-	3
Total No. of Ages Read		7	133	26	20	24	11	5	10	3	239	1000		
Serial Numbers 153, 154, 155, 156, 178												No. of Age Samples 4		
X		Number of fish measured each month										-	-	289
		Mean length of fish (cm) each month										-	-	57.5
		Mean weight of fish (kg) each month										-	-	-
		Total weight caught or landed (tons) each month										-	-	0.45
		Estimated number caught or landed (whole numbers) each month										-	-	289
		Range of depths (m) each month										-	-	50-190
		Mesh size (mm)										-	-	110

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	11	14	Total
Apr	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-
Jun	36	560	107	78	91	47	20	46	15	1000

TABLE 28
(cont'd)

AGE/LENGTH TABLE - COD - 1C - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research)													
CATCHES OR LANDINGS		NK													
COUNTRY		Denmark (Greenland)													
TONNAGE		901-1800 - m/s <i>Skalaberg</i>													
STRUCTURES USED IN AGE DETERMINATION		NK													
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	13	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
												Months Within Quarter			
												Apr	May	Jun	
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
42	2	-	-	-	-	-	-	-	-	-	2	-	-	-	19
45	8	-	-	-	-	-	-	-	-	-	8	-	-	-	87
48	31	-	-	-	-	-	-	-	-	-	31	-	-	-	167
51	39	1	-	-	-	-	-	-	-	-	40	-	-	-	163
54	19	14	-	-	-	-	-	-	-	-	33	-	-	-	111
57	4	12	3	-	-	-	-	-	-	-	19	-	-	-	66
60	1	12	4	2	-	-	-	-	-	-	19	-	-	-	59
63	1	12	1	6	-	-	-	-	-	-	20	-	-	-	58
66	-	5	13	6	-	-	-	-	-	-	24	-	-	-	49
69	-	2	6	11	-	-	-	-	-	-	19	-	-	-	51
72	-	-	3	18	-	-	-	-	-	-	21	-	-	-	52
75	-	-	4	10	3	-	-	-	-	-	17	-	-	-	33
78	-	-	2	6	1	-	-	-	-	-	9	-	-	-	27
81	-	-	-	4	3	1	-	1	2	-	11	-	-	-	17
84	-	-	-	1	1	-	-	-	-	-	2	-	-	-	15
87	-	-	-	-	1	1	1	1	2	-	5	-	-	-	11
90	-	-	-	-	-	-	1	-	-	1	2	-	-	-	7
93	-	-	-	-	-	-	-	1	1	-	2	-	-	-	2
96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Total No. of Ages Read		105	58	36	64	9	3	3	5	1	284	1003			
Serial Numbers		No. of Age Samples										2			
X		Number of fish measured each month										-	-	1989	
		Mean length of fish (cm) each month										-	-	58.9	
		Mean weight of fish (kg) each month										-	-	-	
		Total weight caught or landed (tons) each month										-	-	-	
		Estimated number caught or landed (whole numbers) each month										-	-	-	
		Range of depths (m) each month										-	-	80-85	
		Mesh size (mm)										-	-	-	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	4	5	6	7	8	9	10	11	13	Total
Apr	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-
Jun	516	180	89	160	23	12	5	8	8	1001

TABLE 29
(cont'd)

AGE/LENGTH TABLE - COD - 1D - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research)													Total No. of Ages Read		LENGTH COMPOSITION PER MILLE			
CATCHES OR LANDINGS		Catches															Months Within Quarter			
COUNTRY		Germany, Fed. Rep.																		
TONNAGE		1987																		
STRUCTURES USED IN AGE DETERMINATION		Otoliths																		
Length Group (3 cm)	Age	3	4	5	6	7	8	9	10	11	12	13	14	16	17	19	Total No. of Ages Read	PER MILLE		
																		Apr	May	Jun
36	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
42	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	3
45	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	11
48	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	17
51	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	18
54	-	5	3	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	26
57	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	22
60	-	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	22
63	-	-	2	7	4	-	-	-	-	-	-	-	-	-	-	-	13	-	-	42
66	-	-	1	4	8	1	-	-	-	-	-	-	-	-	-	-	14	-	-	68
69	-	-	1	9	13	1	1	-	-	-	-	-	-	-	-	-	25	-	-	110
72	-	-	-	10	28	5	2	-	-	-	-	-	-	-	-	-	45	-	-	168
75	-	-	-	9	16	14	-	-	-	-	-	-	-	-	-	-	39	-	-	131
78	-	-	-	-	12	9	-	1	-	-	-	-	-	-	3	-	25	-	-	112
81	-	-	-	1	7	13	1	1	3	-	1	-	-	-	-	-	27	-	-	82
84	-	-	-	-	1	10	2	-	1	1	-	-	-	-	1	1	17	-	-	71
87	-	-	-	-	-	5	-	-	1	2	-	1	-	-	-	-	9	-	-	40
90	-	-	-	-	1	7	-	-	2	-	-	1	1	1	-	-	13	-	-	32
93	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	2	-	-	10
96	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	3	-	-	7
99	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	3
102	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	3
Total No. of Ages Read		4	27	12	44	90	65	6	3	11	3	1	2	2	6	1	277	1000		
Serial Numbers 182, 183, 184, 186, 196, 197		No. of Age Samples 4																		
X		Number of fish measured each month															-	-	718	
		Mean length of fish (cm) each month															-	-	74.5	
		Mean weight of fish (kg) each month															-	-	-	
		Total weight caught or landed (tons) each month															-	-	3.0	
		Estimated number caught or landed (whole numbers) each month															-	-	990	
		Range of depths (m) each month															-	-	80-130	
		Mesh size (mm)															-	-	110	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	10	11	12	13	14	16	17	19	Total
Apr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jun	8	74	41	165	350	240	22	10	34	13	3	6	5	25	4	1000

TABLE 29
(cont'd)

AGE/LENGTH TABLE - COD - 1D - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research)																	
CATCHES OR LANDINGS		NK																	
COUNTRY		Denmark (Greenland)																	
TONNAGE		901-1800 - m/s Skalarberg																	
STRUCTURES USED IN AGE DETERMINATION		NK																	
Length Group (3 cm)	Age												Total No. of Ages Read	LENGTH COMPOSITION PER MILLE					
		3	4	5	6	7	8	9	10	11	13	14		16	17	Months Within Quarter			
														Apr	May	Jun	Jun		
39	1	1	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	7	
42	-	4	-	-	-	-	-	-	-	-	-	-	-	-	4	-	1	10	
45	-	24	-	-	-	-	-	-	-	-	-	-	-	-	24	-	21	59	
48	-	35	-	-	-	-	-	-	-	-	-	-	-	-	35	-	34	82	
51	-	45	4	-	-	-	-	-	-	-	-	-	-	-	49	-	48	114	
54	-	13	3	1	-	-	-	-	-	-	-	-	-	-	17	-	24	33	
57	-	2	18	-	1	-	-	-	-	-	-	-	-	-	21	-	27	42	
60	-	1	10	7	-	-	-	-	-	-	-	-	-	-	18	-	31	29	
63	-	-	4	19	5	-	-	-	-	-	-	-	-	-	28	-	65	29	
66	-	-	2	25	19	1	-	-	-	-	-	-	-	-	47	-	103	56	
69	-	-	1	20	39	3	-	-	-	-	-	-	-	-	63	-	148	65	
72	-	-	-	20	62	5	-	-	-	-	-	-	-	-	87	-	186	108	
75	-	-	-	1	45	7	1	-	1	-	-	-	-	-	55	-	103	82	
78	-	-	-	3	26	15	3	-	2	-	-	-	-	-	49	-	76	88	
81	-	-	-	1	19	13	2	1	2	-	-	-	-	-	38	-	58	69	
84	-	-	-	-	5	5	2	1	4	-	-	1	-	-	18	-	31	29	
87	-	-	-	-	2	6	4	-	5	1	1	-	-	-	19	-	27	36	
90	-	-	-	-	-	4	2	1	1	-	-	-	-	-	8	-	7	20	
93	-	-	-	-	-	1	-	-	2	-	-	-	-	1	4	-	7	7	
96	-	-	-	-	-	-	1	-	1	1	-	-	-	-	3	-	-	10	
99	-	-	-	-	-	-	-	-	2	-	-	-	-	-	2	-	-	7	
102	-	-	-	-	-	-	-	1	1	-	2	-	-	-	4	-	-	13	
105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
111	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-	7	
Total No. of Ages Read		1	125	42	97	223	60	15	4	21	2	5	1	1	597	- 997 1002			
Serial Numbers		No. of Age Samples 3																	
X		Number of fish measured each month														-	1090	2817	
		Mean length of fish (cm) each month														-	71.6	69.9	
		Mean weight of fish (kg) each month														-	-	-	
		Total weight caught or landed (tons) each month														-	-	-	
		Estimated number caught or landed (whole numbers) each month														-	-	-	
		Range of depths (m) each month														-	90-180	70-80	
X		Mesh size (mm)														-	-	-	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	10	11	13	14	16	17	Total
Apr	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May/Jun	0	123	63	211	445	99	21	5	26	1	1	2	2	999
Jun	4	291	74	117	307	102	29	9	42	5	16	2	2	1000

TABLE 29
(cont'd)

AGE/LENGTH TABLE - COD - ID - 1964 (4th QUARTER)

GEAR		Otter Trawl (Research)										
CATCHES OR LANDINGS		Catches										
COUNTRY		USSR										
TONNAGE		1800										
STRUCTURES USED IN AGE DETERMINATION		Otoliths										
Length Group (3 cm)	Age	3	4	5	6	7	8	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
									Months Within Quarter			
									Oct	Nov	Dec	
36	-	-	-	-	-	-	-	-	-	2	-	
39	-	-	-	-	-	-	-	-	-	13	-	
42	1	1	-	-	-	-	-	2	-	28	-	
45	14	1	-	-	-	-	-	15	-	91	-	
48	33	3	-	-	-	-	-	36	-	93	-	
51	31	14	-	-	-	-	-	45	-	124	-	
54	18	26	1	-	-	-	-	45	-	120	-	
57	4	39	-	-	-	-	-	43	-	105	-	
60	-	29	1	-	-	-	-	30	-	103	-	
63	-	12	2	-	-	-	-	14	-	52	-	
66	-	4	2	-	-	-	-	6	-	34	-	
69	-	2	4	1	1	-	-	8	-	22	-	
72	-	-	1	2	2	-	-	5	-	22	-	
75	-	-	1	4	4	-	-	9	-	37	-	
78	-	-	-	8	5	1	-	14	-	35	-	
81	-	-	-	7	7	2	-	16	-	38	-	
84	-	-	-	2	4	-	-	6	-	23	-	
87	-	-	-	-	-	5	-	5	-	16	-	
90	-	-	-	-	-	1	-	1	-	18	-	
93	-	-	-	-	-	-	-	-	-	10	-	
96	-	-	-	-	-	-	-	-	-	7	-	
99	-	-	-	-	-	-	-	-	-	1	-	
102	-	-	-	-	-	-	-	-	-	3	-	
105	-	-	-	-	-	-	-	-	-	2	-	
108	-	-	-	-	-	-	-	-	-	-	-	
111	-	-	-	-	-	-	-	-	-	1	-	
Total No. of Ages Read		101	131	12	24	24	8	300	-			
Serial Numbers	No. of Age Samples 2											
X	Number of fish measured each month									-	1576	-
	Mean length of fish (cm) each month									-	60.7	-
	Mean weight of fish (kg) each month									-	1.95	-
	Total weight caught or landed (tons) each month									-	-	-
	Estimated number caught or landed (whole numbers) each month									-	-	-
	Range of depths (m) each month									-	38-137	-
Mesh size (mm)									-	110	-	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	Total
Oct	-	-	-	-	-	-	-
Nov	327	405	43	73	91	24	963
Dec	-	-	-	-	-	-	-

TABLE 30
(cont'd)

AGE/LENGTH TABLE - COD - 1E - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research)															
CATCHES OR LANDINGS		Catches															
COUNTRY		Germany, Fed. Rep.															
TONNAGE		1987															
STRUCTURES USED IN AGE DETERMINATION		Otoliths															
Length Group (3 cm)	Age	2	3	4	5	6	7	8	9	10	11	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE				
													Months Within Quarter				
													Apr	May	Jun		
21		1	-	-	-	-	-	-	-	-	-	1	-	-	6		
24		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
27		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
30		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
33		-	8	-	-	-	-	-	-	-	-	8	-	-	50		
36		-	11	-	-	-	-	-	-	-	-	11	-	-	68		
39		-	14	1	-	-	-	-	-	-	-	15	-	-	93		
42		-	4	-	-	-	-	-	-	-	-	4	-	-	31		
45		-	-	-	-	-	-	-	-	-	-	-	-	-	-		
48		-	1	1	-	1	-	-	-	-	-	3	-	-	25		
51		-	-	2	-	1	-	-	-	-	-	3	-	-	19		
54		-	-	-	2	1	-	-	-	-	-	3	-	-	19		
57		-	-	-	1	8	-	-	-	-	-	9	-	-	68		
60		-	-	-	3	3	-	-	-	-	-	6	-	-	37		
63		-	-	-	1	18	2	-	-	-	-	21	-	-	130		
66		-	-	-	-	11	-	1	-	-	-	12	-	-	75		
69		-	-	-	-	8	2	2	-	-	-	12	-	-	81		
72		-	-	-	-	5	1	6	-	-	-	12	-	-	75		
75		-	-	-	-	2	1	2	-	1	-	6	-	-	37		
78		-	-	-	-	1	3	7	1	-	2	14	-	-	87		
81		-	-	-	-	-	-	5	-	-	-	5	-	-	31		
84		-	-	-	-	-	-	5	1	-	-	6	-	-	37		
87		-	-	-	-	-	-	1	-	-	-	1	-	-	13		
90		-	-	-	-	-	-	-	-	-	-	-	-	-	12		
93		-	-	-	-	-	-	-	-	1	-	1	-	-	6		
Total No. of Ages Read		1	38	4	7	59	9	29	2	2	2	153	1000				
Serial Numbers	207, 208												No. of Age Samples	2			
X	Number of fish measured each month												-	-	161		
	Mean length of fish (cm) each month												-	-	62.0		
	Mean weight of fish (kg) each month												-	-	-		
	Total weight caught or landed (tons) each month												-	-	0.3		
	Estimated number caught or landed (whole numbers) each month												-	-	161		
	Range of depths (m) each month												-	-	95-125		
	Mesh size (mm)												-	-	110		

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	2	3	4	5	6	7	8	9	10	11	Total
Apr	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-
Jun	6	244	28	45	382	57	193	12	15	18	1000

TABLE 30
(cont'd)

AGE/LENGTH TABLE - COD - 1E - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research)															Total No. of Ages Read		LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		NK																	PER MILLE		
COUNTRY		Denmark (Greenland)																	Months Within Quarter		
TONNAGE		901-1800 - m/s Skalaberg																			
STRUCTURES USED IN AGE DETERMINATION		NK																			
Length Group (3 cm)	Age	3	4	5	6	7	8	9	10	11	12	13	14	16	17	20	Total No. of Ages Read	PER MILLE			
																		Apr	May	May/June	
42		2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	3	-	3	-	
45		-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	8	2	
48		-	5	2	-	-	-	-	-	-	-	-	-	-	-	-	7	-	16	6	
51		-	7	6	2	-	-	-	-	-	-	-	-	-	-	-	15	-	29	12	
54		-	4	4	9	-	-	-	-	-	-	-	-	-	-	-	17	-	39	14	
57		-	-	13	17	1	-	-	-	-	-	-	-	-	-	-	31	-	66	29	
60		-	-	4	30	5	1	-	-	-	-	-	-	-	-	-	40	-	98	49	
63		-	-	5	44	21	1	-	-	-	-	1	-	-	-	-	72	-	111	74	
66		-	-	2	35	38	5	-	-	-	-	-	-	-	-	-	80	-	127	101	
69		-	-	-	21	65	6	-	-	-	-	-	-	-	-	-	92	-	109	130	
72		-	-	-	19	75	12	-	-	2	-	-	-	-	-	-	108	-	119	154	
75		-	-	-	5	74	15	2	2	-	-	-	-	-	-	-	98	-	98	130	
78		-	-	-	-	43	25	4	-	2	-	-	-	-	-	-	74	-	65	109	
81		-	-	-	-	18	20	4	-	5	-	-	-	-	-	-	47	-	51	72	
84		-	-	-	-	10	8	4	3	2	1	-	1	-	-	-	29	-	29	46	
87		-	-	-	-	2	7	3	1	-	-	-	1	1	-	-	15	-	15	32	
90		-	-	-	-	-	1	1	1	-	-	-	2	-	-	-	5	-	9	17	
93		-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	2	-	3	9	
96		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	
99		-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	3	3	
102		-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	3	
105		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	1	
Total No. of Ages Read		2	19	36	182	353	101	18	7	13	1	1	5	1	1	1	741	- 1000 1000			
Serial Numbers		No. of Age Samples																			
X	Number of fish measured each month																-	3126	4933		
	Mean length of fish (cm) each month																-	68.9	73.2		
	Mean weight of fish (kg) each month																-	-	-		
	Total weight caught or landed (tons) each month																-	-	-		
	Estimated number caught or landed (whole numbers) each month																-	-	-		
	Range of depths (m) each month																-	90-100	100-150		
Mesh size (mm)																-	-	-			

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	10	11	12	13	14	16	17	20	Total
Apr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May	2	42	75	310	411	108	18	8	14	1	2	5	1	3	1	1001
May/June	0	15	35	216	485	152	30	13	26	2	1	14	2	3	1	995

TABLE 30
(cont'd)

AGE/LENGTH TABLE - COD - 1E - 1964 (3rd QUARTER)

GEAR		Otter Trawl (Commercial)												
CATCHES OR LANDINGS		Landings												
COUNTRY		United Kingdom												
TONNAGE		NK												
STRUCTURES USED IN AGE DETERMINATION		NK												
Length Group (3 cm)	Age	Age					Total No. of Ages Read	LENGTH COMPOSITION PER MILLE						
		3	4	5	6	7		Months Within Quarter						
							Jul			Aug		Sep		
39	-	-	-	-	-	-	-	-	-	-	-	-	-	26.5
42	2	-	-	-	-	-	2	-	-	-	-	-	-	90.1
45	2	-	-	-	-	-	2	-	-	-	-	-	-	101.9
48	-	1	-	-	-	-	1	-	-	-	-	-	-	134.0
51	-	1	-	-	-	-	1	-	-	-	-	-	-	133.6
54	-	-	-	-	-	-	-	-	-	-	-	-	-	75.4
57	-	4	-	-	-	-	4	-	-	-	-	-	-	72.0
60	-	2	1	-	-	-	3	-	-	-	-	-	-	81.8
63	-	-	-	-	1	-	1	-	-	-	-	-	-	15.2
66	-	-	-	1	-	-	1	-	-	-	-	-	-	87.2
69	-	-	-	-	2	1	3	-	-	-	-	-	-	57.2
72	-	-	-	-	-	1	1	-	-	-	-	-	-	7.7
75	-	-	-	-	1	-	1	-	-	-	-	-	-	41.7
78	-	-	-	-	-	-	-	-	-	-	-	-	-	15.2
81	-	-	-	-	-	-	-	-	-	-	-	-	-	33.9
84	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7
87	-	-	-	-	-	-	-	-	-	-	-	-	-	13.2
90	-	-	-	-	-	-	-	-	-	-	-	-	-	2.8
93	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9
96	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9
99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
102	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9
Total No. of Ages Read		4	8	2	4	2	20				999.8			
Serial Numbers		No. of Age Samples												
X		Number of fish measured each month										-	-	-
		Mean length of fish (cm) each month										-	-	-
		Mean weight of fish (kg) each month										-	-	-
		Total weight caught or landed (tons) each month										496.1	522.2	710.4
		Estimated number caught or landed (whole numbers) each month										-	-	-
		Range of depths (m) each month										-	-	-
		Mesh size (mm)										-	-	-

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	Total
Jul	-	-	-	-	-	-
Aug	-	-	-	-	-	-
Sep	-	-	-	-	-	-

TABLE 30
(cont'd)

AGE/LENGTH TABLE - COD - 1E - 1964 (4th QUARTER)

GEAR		Otter Trawl (Research)									
CATCHES OR LANDINGS		Catches									
COUNTRY		Germany, Fed. Rep.									
TONNAGE		1987									
STRUCTURES USED IN AGE DETERMINATION		Otoliths									
Length Group (3 cm)	Age	3	4	5	6	7	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
								Months	Within	Quarter	
								Oct	Nov	Dec	
33	-	-	-	-	-	-	-	-	4	-	
36	1	-	-	-	-	-	1	-	4	-	
39	1	-	-	-	-	-	1	-	28	-	
42	20	-	-	-	-	-	20	-	190	-	
45	43	-	-	-	-	-	43	-	351	-	
48	21	2	-	-	-	-	23	-	242	-	
51	17	3	-	-	-	-	20	-	117	-	
54	3	3	-	-	-	-	6	-	44	-	
57	-	1	-	-	-	-	1	-	8	-	
60	-	-	-	-	-	-	-	-	4	-	
63	-	-	-	-	-	-	-	-	-	-	
66	-	-	-	-	-	-	-	-	-	-	
69	-	-	-	-	-	-	-	-	-	-	
72	-	-	-	-	-	-	-	-	-	-	
75	-	-	-	-	-	1	1	-	4	-	
78	-	-	-	-	-	-	-	-	4	-	
								-	1000	-	
Total No. of Ages Read		106	9	-	-	1	116	X			
Serial Numbers	429							No. of Age Samples	1	X	
X	Number of fish measured each month							-	248	X	
	Mean length of fish (cm) each month							-	47.9	X	
	Mean weight of fish (kg) each month							-	-	X	
	Total weight caught or landed (tons) each month							-	0.6	X	
	Estimated number caught or landed (whole numbers) each month							-	744	X	
	Range of depths (m) each month							-	70-80	X	
Mesh size (mm)							-	110	X		

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	Total
Oct	-	-	-	-	-	-
Nov	922	70	-	-	8	1000
Dec	-	-	-	-	-	-

TABLE 31

AGE/LENGTH TABLE - COD - 1F - 1964 (1st QUARTER)

GEAR		Otter Trawl (Commercial)														Total No. of Ages Read	LENGTH COMPOSITION PER MILLE				
CATCHES OR LANDINGS		Landings															Months Within Quarter	Jan	Feb	Mar	
COUNTRY		Germany, Fed. Rep.																			
TONNAGE		1423																			
STRUCTURES USED IN AGE DETERMINATION		Otoliths																			
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	12	13	14	16	17	18	19	Total No. of Ages Read	MONTHS WITHIN QUARTER			
																		Jan	Feb	Mar	
51	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	
54	1	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	16	
57	-	4	1	2	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	42	
60	-	2	3	3	1	-	-	-	-	-	-	-	-	-	-	-	9	-	-	78	
63	-	-	6	5	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	130	
66	-	-	8	5	2	-	-	-	-	-	-	-	-	-	-	-	15	-	-	182	
69	-	-	2	12	-	-	-	-	-	-	-	-	-	-	-	-	14	-	-	127	
72	-	-	1	13	-	-	-	-	-	-	-	-	-	-	-	-	14	-	-	116	
75	-	-	-	11	1	1	1	-	-	-	-	-	-	-	-	-	15	-	-	129	
78	-	-	-	11	2	1	-	2	-	-	-	-	-	-	-	-	16	-	-	66	
81	-	-	-	5	1	-	1	2	-	-	-	-	-	-	-	-	9	-	-	35	
84	-	-	-	2	1	-	2	5	-	1	-	-	1	-	-	-	12	-	-	30	
87	-	-	-	-	-	1	-	8	-	-	1	-	1	-	-	-	11	-	-	18	
90	-	-	-	-	1	-	-	4	1	2	-	-	1	-	-	-	9	-	-	13	
93	-	-	-	-	-	-	-	1	-	1	-	-	1	-	-	-	3	-	-	9	
96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	3	
99	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	3	
102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	0	
114	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	0	
Total No. of Ages Read		1	9	22	70	9	3	4	22	1	4	1	1	5	1	1	154	1000			
Serial Numbers		18														No. of Age Samples					1
X		Number of fish measured each month														-	-	485			
		Mean length of fish (cm) each month														-	-	71.3			
		Mean weight of fish (kg) each month														-	-	-			
		Total weight caught or landed (tons) each month														-	-	40			
		Estimated number caught or landed (whole numbers) each month														-	-	15697			
		Range of depths (m) each month														-	-	?			
Mesh size (mm)																-	-	110			

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	4	5	6	7	8	9	10	11	12	13	14	16	17	18	19	Total
Jan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar	4	50	233	545	57	16	17	51	1	8	1	3	11	-	3	1000

TABLE 31
(cont'd)

AGE/LENGTH TABLE - COD - 1F - 1964 (1st QUARTER)

GEAR		Otter Trawl (Commercial)															Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		Landings																Months Within Quarter		
COUNTRY		Germany, Fed. Rep.																		
TONNAGE		653 and 825																		
STRUCTURES USED IN AGE DETERMINATION		Otoliths																		
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	12	13	14	15	17	18	>18	Jan	Feb.	Mar	
	48	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-				-
51	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	5	4	-	2
54	1	3	9	-	-	-	-	-	-	-	-	-	-	-	-	-	13	14	-	14
57	-	4	19	3	-	-	-	-	-	-	-	-	-	-	-	-	26	26	-	29
60	-	3	14	5	-	-	-	-	-	-	-	-	-	-	-	-	22	39	-	40
63	-	1	21	10	-	-	-	-	-	-	-	-	-	-	-	-	32	56	-	106
66	-	-	10	28	4	-	-	-	-	-	-	-	-	-	-	-	42	92	-	159
69	-	-	12	36	7	1	-	-	-	-	-	-	-	-	-	-	56	122	-	230
72	-	-	6	35	11	3	-	1	-	-	-	-	-	-	-	-	56	164	-	127
75	-	-	2	33	15	1	1	2	-	-	-	-	-	-	-	-	54	139	-	112
78	-	-	1	21	33	4	1	4	-	-	-	-	-	-	-	-	64	136	-	63
81	-	-	-	4	20	3	1	2	-	-	-	1	-	-	-	-	31	63	-	28
84	-	-	-	2	17	2	6	7	-	-	-	-	-	-	-	-	34	48	-	48
87	-	-	-	1	12	2	2	7	1	1	2	-	1	1	1	1	31	40	-	17
90	-	-	-	-	5	4	1	8	3	3	-	1	1	1	-	-	27	25	-	11
93	-	-	-	-	1	1	1	6	2	-	2	-	1	-	-	-	14	16	-	4
96	-	-	-	-	1	-	-	4	1	-	1	-	-	-	-	-	7	7	-	2
99	-	-	-	-	-	-	-	3	-	1	-	-	-	-	-	-	4	6	-	2
102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	1
Total No. of Ages Read		2	14	97	178	126	21	13	44	7	5	5	2	3	2	2	521	1000	-	1000
Serial Numbers	2, 14	No. of Age Samples 2																		
X	Number of fish measured each month																796	-	461	
	Mean length of fish (cm) each month																74.9	-	71.8	
	Mean weight of fish (kg) each month																-	-	-	
	Total weight caught or landed (tons) each month																136	-	128	
	Estimated number caught or landed (whole numbers) each month																41902	-	46684	
	Range of depths (m) each month																?	-	?	
Mesh size (mm)																110	-	110		

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	4	5	6	7	8	9	10	11	12	13	14	15	17	18	>18	Total
Jan	-	8	170	383	293	37	21	58	6	5	8	4	4	3	-	1000
Feb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar	8	55	160	547	131	37	7	44	4	3	1	-	-	-	3	1000

TABLE 31
(cont'd)

AGE/LENGTH TABLE - COD - 1F - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research)															Total No. of Ages Read		LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		Catches																			
COUNTRY		Germany, Fed. Rep.																			
TONNAGE		999																			
STRUCTURES USED IN AGE DETERMINATION		Otoliths																			
Length Group (3 cm)	Age	3	4	5	6	7	8	9	10	11	12	13	14	16	17	19	Total No. of Ages Read	Months Within Quarter			
		Apr	May	Jun																	
27		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	0	
30		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
33		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
36		1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	
39		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
42		-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	3	
45		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
48		-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	10	
51		-	1	-	3	-	-	-	-	-	-	-	-	-	-	-	4	-	-	21	
54		-	1	1	11	1	-	-	-	-	-	-	-	-	-	-	14	-	-	57	
57		-	-	3	29	1	-	-	-	-	-	-	-	-	-	-	33	-	-	104	
60		-	-	-	29	2	-	-	-	-	-	-	-	-	-	-	31	-	-	151	
63		-	-	-	21	11	1	-	-	-	-	-	-	-	-	-	33	-	-	160	
66		-	-	-	10	15	2	-	-	-	-	-	-	-	-	-	27	-	-	111	
69		-	-	-	4	14	6	-	-	-	-	-	-	-	-	-	24	-	-	103	
72		-	-	-	-	11	14	-	-	-	-	-	-	-	-	-	25	-	-	92	
75		-	-	-	1	9	14	1	-	-	-	-	-	-	-	-	25	-	-	84	
78		-	-	-	-	4	12	3	1	-	-	-	-	-	-	-	20	-	-	53	
81		-	-	-	-	2	9	1	1	-	-	-	-	-	-	-	14	-	-	27	
84		-	-	-	-	1	2	1	-	-	-	-	-	-	1	-	5	-	-	10	
87		-	-	-	-	1	-	-	1	-	-	-	1	-	-	-	3	-	-	5	
90		-	-	-	-	-	-	-	1	4	-	1	-	1	-	-	7	-	-	2	
93		-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	2	-	-	-	
96		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
99		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
102		-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	0	
Total No. of Ages Read		2	5	4	108	72	60	7	5	4	1	1	1	1	1	1	273	1000			
Serial Numbers 402, 403, 404, 33		No. of Age Samples 2																			
X		Number of fish measured each month															-	-	3187		
		Mean length of fish (cm) each month															-	-	66.7		
		Mean weight of fish (kg) each month															-	-	-		
		Total weight caught or landed (tons) each month															-	-	7		
		Estimated number caught or landed (whole numbers) each month															-	-	3187		
		Range of depths (m) each month															-	-	110720		
Mesh size (mm)																	-	-	40		

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	10	11	12	13	14	16	17	19	Total
Apr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jun	2	27	14	457	281	191	15	6	2	-	-	1	-	2	2	1000

TABLE 31
(cont'd)

AGE/LENGTH TABLE - COD - 1F - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Commercial)																	
CATCHES OR LANDINGS															Landings				
COUNTRY															Germany, Fed. Rep.				
TONNAGE															500-900				
STRUCTURES USED IN AGE DETERMINATION		Otoliths																	
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	12	13	14	16	17	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
																Months Within Quarter	Apr	May	Jun
51		1	1	-	-	-	-	-	-	-	-	-	-	-	2	2	-	2	
54		1	3	5	-	-	-	-	-	-	-	-	-	-	9	13	-	32	
57		-	5	18	-	-	-	-	-	-	-	-	-	-	23	46	-	78	
60		-	2	16	3	-	-	-	-	-	-	-	-	-	21	56	-	91	
63		-	2	19	5	-	-	-	-	-	-	-	-	-	26	95	-	98	
66		-	-	7	20	2	-	-	-	-	-	-	-	-	29	111	-	93	
69		-	-	1	20	2	-	-	-	-	-	-	-	-	23	115	-	92	
72		-	-	-	19	6	2	-	-	-	-	-	-	-	27	151	-	121	
75		-	-	3	14	7	2	-	1	-	-	-	-	-	27	126	-	102	
78		-	-	-	7	9	8	1	1	-	-	-	-	-	26	112	-	101	
81		-	-	-	5	7	3	3	3	-	-	-	-	-	21	46	-	68	
84		-	-	-	4	8	4	-	5	-	-	2	-	1	24	60	-	38	
87		-	-	-	1	1	1	1	8	1	-	1	-	1	15	29	-	29	
90		-	-	-	-	-	1	1	6	1	1	-	-	-	10	19	-	31	
93		-	-	-	-	1	1	2	4	1	-	-	-	-	9	11	-	14	
96		-	-	-	-	-	-	-	2	-	-	1	-	-	3	4	-	7	
99		-	-	-	-	-	-	-	-	-	-	1	-	1	2	3	-	-	
102		-	-	-	-	-	-	-	1	1	-	1	-	-	3	1	-	3	
Total No. of Ages Read		2	13	69	98	43	22	8	31	4	1	6	-	3	300	1000	-	1000	
Serial Numbers	24, 33														No. of Age Samples	2			
X		Number of fish measured each month													441	-	344		
		Mean length of fish (cm) each month													73.4	-	72.4		
		Mean weight of fish (kg) each month													-	-	-		
		Total weight caught or landed (tons) each month													63	-	145		
		Estimated number caught or landed (whole numbers) each month													23375	-	56201		
		Range of depths (m) each month													-	-	-		
		Mesh size (mm)													110	-	110		

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	4	5	6	7	8	9	10	11	12	13	14	16	17	Total
Apr	-	48	157	416	162	106	11	78	8	-	9	-	5	1000
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jun	8	18	299	392	143	36	42	28	4	5	10	5	10	1000

TABLE 31
(cont'd)

AGE/LENGTH TABLE - COD - 1F - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Commercial)								
CATCHES OR LANDINGS		NK								
COUNTRY		United Kingdom								
TONNAGE		NK								
STRUCTURES USED IN AGE DETERMINATION		NK								
Length Group (3 cm)	Age	3	4	5	6	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
							Months Within Quarter			
							Apr	May	Jun	
42		-	-	-	-	-	-	-	34.1	
45		-	-	-	-	-	-	-	34.1	
48		-	-	-	-	-	-	-	18.2	
51		-	-	-	2	2	-	-	56.3	
54		-	1	-	2	3	-	-	142.8	
57		-	-	-	3	3	-	-	115.2	
60		-	-	-	-	-	-	-	147.6	
63		-	-	-	-	-	-	-	99.5	
66		-	-	-	-	-	-	-	108.6	
69		-	-	-	-	-	-	-	87.6	
72		-	-	-	-	-	-	-	48.3	
75		-	-	-	-	-	-	-	36.4	
78		-	-	-	-	-	-	-	9.8	
81		-	-	-	-	-	-	-	7.1	
84		-	-	-	-	-	-	-	33.1	
87		-	-	-	-	-	-	-	7.1	
90		-	-	-	-	-	-	-	-	
93		-	-	-	-	-	-	-	4.7	
96		-	-	-	-	-	-	-	4.7	
99		-	-	-	-	-	-	-	4.7	
Total No. of Ages Read		-	1	-	7	8	999.9			
Serial Numbers		No. of Age Samples								
X		Number of fish measured each month					-	-	-	
		Mean length of fish (cm) each month					-	-	-	
		Mean weight of fish (kg) each month					-	-	-	
		Total weight caught or landed (tons) each month					-	-	1247.9	
		Estimated number caught or landed (whole numbers) each month					-	-	-	
		Range of depths (m) each month					-	-	-	
		Mesh size (mm)					-	-	-	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	Total
Apr	-	-	-	-	-
May	-	-	-	-	-
Jun	-	-	-	-	-

TABLE 31
(cont'd)

AGE/LENGTH TABLE - COD - 1F - 1964 (3rd QUARTER)

GEAR		Otter Trawl (Commercial)										
CATCHES OR LANDINGS		Landings										
COUNTRY		Germany, Fed. Rep.										
TONNAGE		952										
STRUCTURES USED IN AGE DETERMINATION		Otoliths										
Length Group (3 cm)	Age	3	4	5	6	7	8	Total No. of Ages Read	LENGTH COMPOSITION PER MILE			
									Months Within Quarter	Jul	Aug.	Sep
48		3	2	-	-	-	-	5	-	-	8	
51		-	4	2	-	-	-	6	-	-	16	
54		-	1	2	3	-	-	6	-	-	21	
57		-	-	3	9	-	-	12	-	-	28	
60		-	-	9	24	1	1	35	-	-	128	
63		-	-	4	19	4	2	29	-	-	152	
66		-	-	2	18	2	1	23	-	-	177	
69		-	-	-	21	2	-	23	-	-	166	
72		-	-	-	8	3	1	12	-	-	98	
75		-	-	-	5	3	6	14	-	-	107	
78		-	-	-	-	3	1	4	-	-	26	
81		-	-	-	-	-	3	3	-	-	30	
84		-	-	-	-	-	2	2	-	-	31	
87		-	-	-	-	-	-	-	-	-	7	
90		-	-	-	-	-	-	-	-	-	5	
Total No. of Ages Read		3	7	22	107	18	17	174			1000	
Serial Numbers	38							No. of Age Samples	1			
		Number of fish measured each month							-	-	405	
		Mean length of fish (cm) each month							-	-	69.0	
		Mean weight of fish (kg) each month							-	-	-	
		Total weight caught or landed (tons) each month							-	-	32	
		Estimated number caught or landed (whole numbers) each month							-	-	13677	
		Range of depths (m) each month							-	-	-	
		Mesh size (mm)							-	-	110	

AGE COMPOSITIONS OF LANDINGS (PER MILE)

Month	3	4	5	6	7	8	Total
Jul	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-
Sep	5	16	89	614	121	155	1000

TABLE 32

AGE/LENGTH TABLE - COD - INK - 1964 (1st QUARTER)

GEAR		Otter Trawl (Commercial)												
CATCHES OR LANDINGS		NK												
COUNTRY		United Kingdom												
TONNAGE		NK												
STRUCTURES USED IN AGE DETERMINATION		NK												
Length Group (3 cm)	Age	5	6	7	9	10	11	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE					
									Months Within Quarter					
									Jan	Feb	Mar			
54		1	-	-	-	-	-	1	-	-	-			
57		4	-	1	-	-	-	5	-	-	-			
60		3	1	1	-	-	-	5	-	-	-			
63		2	1	3	-	-	-	6	-	-	-			
66		1	-	1	-	-	1	3	-	-	-			
69		-	-	4	-	-	-	4	-	-	-			
72		-	1	1	-	-	-	2	-	-	-			
75		-	-	2	-	-	-	2	-	-	-			
78		-	-	-	-	1	-	1	-	-	-			
81		-	-	-	1	-	-	1	-	-	-			
Total No. of Ages Read		11	3	13	1	1	1	30	X					
Serial Numbers		No. of Age Samples												
X		Number of fish measured each month										-	-	-
		Mean length of fish (cm) each month										-	-	-
		Mean weight of fish (kg) each month										-	-	-
		Total weight caught or landed (tons) each month										-	-	-
		Estimated number caught or landed (whole numbers) each month										-	-	-
		Range of depths (m) each month										-	-	-
		Mesh size (mm)										-	-	-

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	5	6	7	9	10	11	Total
Jan	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-

TABLE 33

AGE/LENGTH TABLE - COD - South East Greenland - 1964 (1st QUARTER)

GEAR		Otter Trawl (Commercial)														Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		Landings															Months Within Quarter		
COUNTRY		Germany, Fed. Rep.																	
TONNAGE		689																	
STRUCTURES USED IN AGE DETERMINATION		Otoliths																	
Length Group (3 cm)	Age	5	6	7	8	9	10	11	12	13	14	15	16	17	>17	Jan	Feb	Mar	
		48	-	2	-	-	-	-	-	-	-	-	-	-	-				-
51	1	2	-	-	-	-	-	-	-	-	-	-	-	-	3	1	-	-	
54	-	8	1	-	-	-	-	-	-	-	-	-	-	-	9	8	-	2	
57	-	8	1	1	-	-	-	-	-	-	-	-	-	-	10	18	-	2	
60	-	10	2	3	-	-	-	-	-	-	-	-	-	-	15	41	-	3	
63	-	3	8	-	-	-	1	-	-	-	-	-	-	-	12	63	-	11	
66	-	4	11	9	-	-	-	-	-	-	-	-	-	-	24	91	-	18	
69	-	3	9	14	-	-	1	-	-	-	-	-	-	-	27	139	-	56	
72	-	2	18	23	2	1	1	-	-	-	-	-	-	-	47	147	-	111	
75	-	1	11	17	3	-	-	-	-	-	-	-	-	-	32	155	-	157	
78	-	-	7	20	1	1	3	-	-	1	-	1	-	-	34	153	-	144	
81	-	-	3	14	4	-	2	2	1	-	1	-	-	-	27	68	-	153	
84	-	-	4	11	3	-	3	-	1	1	2	-	5	1	31	56	-	94	
87	-	-	-	5	-	1	5	-	-	-	-	-	-	1	12	18	-	99	
90	-	-	-	2	1	-	4	-	1	1	-	1	1	1	12	15	-	52	
93	-	-	-	2	-	1	4	-	-	1	-	-	-	-	8	8	-	35	
96	-	-	-	-	-	-	1	-	-	1	-	-	1	1	4	10	-	42	
99	-	-	-	-	-	-	3	1	-	-	-	-	-	-	4	3	-	12	
102	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	2	-	2	
105	-	-	-	-	-	-	1	-	-	-	-	-	1	-	2	2	-	2	
108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	
Total No. of Ages Read		1	43	75	121	14	4	29	3	4	5	3	2	8	4	316	1000 - 1000		
Serial Numbers		4, 15												No. of Age Samples			2		
X		Number of fish measured each month														402	-	448	
		Mean length of fish (cm) each month														74.8	-	81.7	
		Mean weight of fish (kg) each month														-	-	-	
		Total weight caught or landed (tons) each month														64	-	76	
		Estimated number caught or landed (whole numbers) each month														21429	-	76475	
		Range of depths (m) each month														-	-	-	
		Mesh size (mm)														110	-	110	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	5	6	7	8	9	10	11	12	13	14	15	16	17	>17	Total
Jan	-	98	201	545	45	13	39	5	7	13	13	-	8	13	1000
Feb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar	2	140	381	311	35	7	77	6	7	6	-	7	18	3	1000

TABLE 34

AGE/LENGTH TABLE - COD - East Greenland - 1964 (1st QUARTER)

GEAR		Otter Trawl (Commercial)														LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		Landings														Months Within Quarter		
COUNTRY		Germany, Fed. Rep.																
TONNAGE		565																
STRUCTURES USED IN AGE DETERMINATION		Otoliths																
Length Group (3 cm)	Age	5	6	7	8	9	10	11	13	14	15	17	18	Total No. of Ages Read				
															Jan	Feb.	Mar	
54		1	-	-	-	-	-	-	-	-	-	-	-	1	-	2	1	
57		-	1	1	-	-	-	-	-	-	-	-	-	2	-	2	1	
60		1	1	1	-	-	-	-	-	-	-	-	-	3	-	3	7	
63		-	1	2	3	-	-	-	-	-	-	-	-	6	-	11	10	
66		1	3	1	2	-	-	-	-	-	-	-	-	7	-	18	16	
69		-	4	7	17	-	-	2	-	-	-	-	-	30	-	56	55	
72		-	2	3	36	3	-	1	-	-	-	-	-	45	-	111	94	
75		-	4	2	46	6	-	-	-	-	-	-	-	58	-	157	175	
78		-	-	-	37	7	-	-	-	-	-	-	1	45	-	144	141	
81		-	-	1	49	4	2	1	-	-	-	-	-	57	-	153	144	
84		-	-	-	24	1	-	5	-	1	-	-	-	31	-	94	119	
87		-	-	-	17	3	1	5	-	-	2	-	-	28	-	99	70	
90		-	-	-	8	3	1	2	-	-	-	-	-	14	-	52	56	
93		-	-	1	4	1	-	3	-	1	1	-	-	11	-	35	43	
96		-	-	-	5	-	-	3	1	1	-	-	-	10	-	42	26	
99		-	-	-	-	1	-	1	-	-	1	-	-	3	-	12	23	
102		-	-	-	-	-	-	1	-	1	-	-	-	2	-	2	7	
105		-	-	-	-	1	-	-	-	-	-	-	-	1	-	2	6	
108		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
111		-	-	-	-	-	-	1	-	-	1	-	-	2	-	5	4	
114		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
117		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
120		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Total No. of Ages Read		3	16	19	248	30	4	25	1	3	5	1	1	356				
Serial Numbers 8, 13		No. of Age Samples 2																
		Number of fish measured each month												-	448	495		
		Mean length of fish (cm) each month												-	81.7	82.0		
		Mean weight of fish (kg) each month												-	-	-		
		Total weight caught or landed (tons) each month												-	76	174		
		Estimated number caught or landed (whole numbers) each month												-	18855	42266		
		Range of depths (m) each month												-	-	-		
		Mesh size (mm)												-	110	110		

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	5	6	7	8	9	10	11	13	14	15	17	18	Total
Jan	-	-	-	-	-	-	-	-	-	-	-	-	-
Feb	-	2	32	755	95	17	75	-	5	19	-	-	1000
Mar	9	62	54	645	85	10	92	6	16	10	6	5	1000

TABLE 34
(cont'd)

AGE/LENGTH TABLE - COD - East Greenland - 1964 (4th QUARTER)

GEAR		Otter Trawl (Commercial)																
CATCHES OR LANDINGS		Landings																
COUNTRY		Germany, Fed. Rep.																
TONNAGE		565 and 824																
STRUCTURES USED IN AGE DETERMINATION		Otoliths																
Length Group (3 cm)	Age	3	4	5	6	7	8	9	11	12	13	14	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE				
														Months Within Quarter				
												Oct	Nov	Dec				
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	
51	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	
54	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	5	-	
57	-	2	-	-	-	-	-	-	-	-	-	-	2	-	-	6	2	
60	-	2	-	1	-	-	-	-	-	-	-	-	3	-	-	4	2	
63	-	-	-	3	-	-	-	-	-	-	-	-	3	-	-	10	6	
66	-	-	3	3	-	-	-	-	-	-	-	-	6	-	-	15	10	
69	-	2	4	8	5	2	-	-	-	-	-	-	21	-	-	46	28	
72	-	-	1	7	5	11	-	-	-	-	-	-	24	-	-	55	90	
75	-	-	1	14	7	15	-	-	-	-	-	-	37	-	-	92	103	
78	-	-	1	14	10	25	2	-	-	-	-	-	52	-	-	131	137	
81	-	-	-	2	2	35	-	1	-	-	-	-	40	-	-	113	165	
84	-	-	-	8	3	33	-	-	-	-	-	-	44	-	-	163	167	
87	-	-	-	2	1	27	1	4	-	-	-	-	35	-	-	105	139	
90	-	-	-	3	1	18	2	-	-	-	-	-	24	-	-	115	66	
93	-	-	-	-	-	7	-	3	-	-	1	-	11	-	-	65	47	
96	-	-	-	-	-	4	-	1	-	-	-	1	6	-	-	28	19	
99	-	-	-	-	-	1	-	2	1	-	-	-	4	-	-	19	10	
102	-	-	-	-	-	-	-	1	-	-	-	1	2	-	-	14	6	
105	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	5	-	
108	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	5	-	
111	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	3	
Total No. of Ages Read		1	7	10	65	34	178	5	13	1	1	4	319					
Serial Numbers	42, 47	No. of Age Samples											2					
X	Number of fish measured each month													-	487	433		
	Mean length of fish (cm) each month													-	83.9	83.0		
	Mean weight of fish (kg) each month													-	-	-		
	Total weight caught or landed (tons) each month													-	47	74		
	Estimated number caught or landed (whole numbers) each month													-	10223	16553		
	Range of depths (m) each month													-	-	-		
Mesh size (mm)													-	110	110			

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	11	12	13	14	Total
Oct	-	-	-	-	-	-	-	-	-	-	-	-
Nov	4	14	33	190	95	546	24	43	9	-	42	1000
Dec	-	10	14	174	97	637	11	51	-	6	-	1000

TABLE 35
(cont'd)

AGE/LENGTH TABLE - COD - 2J - 1964 (1st QUARTER)

GEAR		Otter Trawl (Commercial)															Total No. of Ages Read		LENGTH COMPOSITION PER MILE		
CATCHES OR LANDINGS		Catches after discard																	Months Within Quarter		
COUNTRY		Portugal																			
TONNAGE		1287.6																			
STRUCTURES USED IN AGE DETERMINATION		Otoliths																			
Length Group (3 cm)	Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total No. of Ages Read	PER MILE			
																		Jan	Feb	Mar	
36	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	
39	7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	11	
42	5	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	43	
45	2	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	74	
48	-	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	111	
51	-	2	7	1	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	133	
54	-	-	5	4	-	1	-	-	-	-	-	-	-	-	-	-	10	-	-	178	
57	-	2	5	2	-	-	-	-	1	-	-	-	-	-	-	-	10	-	-	124	
60	-	1	4	3	1	-	-	-	-	1	-	-	-	-	-	-	10	-	-	105	
63	-	-	2	5	2	-	-	1	-	-	-	-	-	-	-	-	10	-	-	90	
66	-	-	3	2	3	-	1	-	-	-	-	1	-	-	-	-	10	-	-	58	
69	-	1	1	3	1	2	1	1	-	-	-	-	-	-	-	-	10	-	-	30	
72	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	1	3	-	-	17	
75	-	-	-	1	-	-	1	-	-	-	-	-	-	1	1	-	4	-	-	13	
78	-	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	3	-	-	3	
81	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	1	3	-	-	4	
84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	2	
90	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	1	
Total No. of Ages Read		15	17	40	21	7	5	4	2	3	1	2	2	1	1	3	124	998			
Serial Numbers 5 (lengths only)		No. of Age Samples ¹																			
X		Number of fish measured each month															-	-	925		
		Mean length of fish (cm) each month															-	-	56.4		
		Mean weight of fish (kg) each month															-	-	-		
		Total weight caught or landed (tons) each month															-	-	4278		
		Estimated number caught or landed (whole numbers) each month															-	-	-		
		Range of depths (m) each month															-	-	256-420		
		Mesh size (mm)															-	-	114		

AGE COMPOSITIONS OF LANDINGS (PER MILE)

Month	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
Jan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar	47	135	447	209	49	31	18	12	15	1	12	7	3	3	9	998

¹ Serial numbers of age samples with lengths: 1, 3, 4, 6, 7, 8, 10

TABLE 35
(cont'd)

AGE/LENGTH TABLE - COD - 2J - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Research, Exploratory)														
CATCHES OR LANDINGS		Catches														
COUNTRY		USSR														
TONNAGE		1800														
STRUCTURES USED IN AGE DETERMINATION		Otoliths														
Length Group (3 cm)	Age	5	6	7	8	9	10	11	12	13	15	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
		Months Within Quarter			Apr	May	Jun									
24	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	
27	-	-	-	-	-	-	-	-	-	-	-	-	-	5	9	
30	-	-	-	-	-	-	-	-	-	-	-	-	-	11	14	
33	-	-	-	-	-	-	-	-	-	-	-	-	-	22	26	
36	-	-	-	-	-	-	-	-	-	-	-	-	-	43	53	
39	-	3	-	-	-	-	-	-	-	-	-	3	17	57	102	
42	2	5	6	3	-	-	-	-	-	-	-	16	32	67	69	
45	2	7	18	7	-	-	-	-	-	-	-	34	96	116	131	
48	-	8	33	29	2	-	-	-	-	-	-	72	155	139	202	
51	-	5	30	27	2	-	2	-	-	-	-	66	178	139	126	
54	1	1	23	10	4	3	3	1	-	-	-	46	185	130	113	
57	-	-	6	15	4	1	2	1	1	1	1	31	128	110	65	
60	-	-	3	5	5	2	1	-	1	1	1	18	93	67	48	
63	-	-	1	4	1	1	-	-	1	-	-	8	53	46	19	
66	-	-	-	1	-	1	-	-	1	1	1	4	24	24	8	
69	-	-	-	1	-	-	-	-	-	-	-	1	13	11	6	
72	-	-	-	-	-	-	-	-	-	-	-	-	6	6	2	
75	-	-	-	-	-	-	1	-	-	-	-	1	5	4	2	
78	-	-	-	-	-	-	-	-	-	-	-	-	2	2	1	
81	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
Total No. of Ages Read		5	29	120	102	18	8	9	2	4	3	300				
Serial Numbers		No. of Age Samples 1 (April only)														
X	Number of fish measured each month													37517	27420	16026
	Mean length of fish (cm) each month													54.04	51.31	48.78
	Mean weight of fish (kg) each month													1.40	1.22	1.00
	Total weight caught or landed (tons) each month													8804	2032	11241
	Estimated number caught or landed (whole numbers) each month													-	-	-
	Range of depths (m) each month													110-220	55-220	110-165
Mesh size (mm)													110	110	110	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	5	6	7	8	9	10	11	12	13	15	Total
Apr	14	81	356	335	75	39	35	8	22	15	980
May	18	131	316	290	58	31	27	7	20	14	912
Jun	19	185	325	260	43	18	20	4	9	7	890

TABLE 35
(cont'd)

AGE/LENGTH TABLE - COD - 2J - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Commercial)																								
CATCHES OR LANDINGS		Catches after discard																								
COUNTRY		Portugal																								
TONNAGE		1287.6																								
STRUCTURES USED IN AGE DETERMINATION		Otoliths																								
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	23	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE					
																					Months Within Quarter					
																			Apr	May	Jun					
36	2	17	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	16	14	-			
39	-	15	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	44	49	-			
42	-	10	7	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	90	114	-			
45	-	2	7	9	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	140	128	-			
48	-	1	9	6	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	20	136	137	-			
51	-	-	4	11	4	-	-	1	-	-	-	-	-	-	-	-	-	-	-	20	131	93	-			
54	-	-	3	11	4	-	-	-	-	1	1	-	-	-	-	-	-	-	-	20	133	113	-			
57	-	-	-	10	7	-	2	-	1	-	-	-	-	-	-	-	-	-	-	20	98	91	-			
60	-	-	-	5	9	2	1	1	2	-	-	-	-	-	-	-	-	-	-	20	65	77	-			
63	-	-	1	3	8	4	-	1	2	1	-	-	-	-	-	-	-	-	-	20	54	74	-			
66	-	-	-	1	4	3	3	4	1	1	2	-	1	-	-	-	-	-	-	20	30	33	-			
69	-	-	1	-	2	4	3	3	1	2	1	1	-	-	-	-	1	1	-	20	20	33	-			
72	-	-	1	-	3	4	-	-	3	5	2	-	2	-	-	-	-	-	-	20	15	15	-			
75	-	-	-	-	1	1	2	-	4	2	2	1	-	1	-	1	-	-	-	15	9	13	-			
78	-	-	-	-	1	-	2	2	-	-	-	-	-	-	-	-	1	-	1	7	6	6	-			
81	-	-	-	-	1	-	-	1	1	-	-	-	1	-	1	-	-	-	-	5	2	5	-			
84	-	-	-	-	1	-	-	-	-	2	-	1	-	1	1	-	-	-	-	6	3	2	-			
87	-	-	-	-	-	-	-	-	-	-	1	-	-	2	-	-	-	-	1	4	2	1	-			
90	-	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-	-	-	-	4	2	1	-			
93	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	1	-	-	4	2	1	-			
96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-			
99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1	-	-			
102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
105	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1	-	-	3	1	1	-			
Total No. of Ages Read	2	45	38	60	49	19	14	14	17	14	9	4	7	5	3	5	2	2	309	1000	1002	-				
Serial Numbers (lengths only):		12,17,29,33,34																			No. of Age Samples ¹					
X		Number of fish measured each month																			1716	1624	-			
		Mean length of fish (cm) each month																			53.5	53.8	-			
		Mean weight of fish (kg) each month																			-	-	-			
		Total weight caught or landed (tong) each month																			15328	6128	-			
		Estimated number caught or landed (whole numbers) each month																			-	-	-			
		Range of depths (m) each month																			256-439	196-366	-			
		Mesh size (mm)																			114	114	-			

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	23	Total
Apr	1	112	203	339	179	36	30	24	26	19	14	3	4	3	1	3	1	1	1000
May	2	126	200	304	177	45	33	27	30	20	15	3	6	2	1	4	2	1	998
Jun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ Serial numbers of age samples with lengths: 11, 13, 14, 15, 16, 18, 19, 20, 21, 23, 24, 26, 27, 28, 30, 31, 32

TABLE 35
(cont'd)

AGE/LENGTH TABLE - COD - 2J - 1964 (3rd QUARTER)

GEAR		Otter Trawl (Commercial)																				Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		Catches after discard																					Months Within Quarter		
COUNTRY		Portugal																							
TONNAGE		1287.6																							
STRUCTURES USED IN AGE DETERMINATION		Otoliths																							
Length Group (3 cm)	Age	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	21	Jul	Aug	Sep				
	36		3	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-				-	8	-	32
39		-	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	60	58			
42		-	2	5	2	1	-	-	-	-	-	-	-	-	-	-	-	-	10	-	72	122			
45		-	-	7	3	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	81	104			
48		-	-	4	3	3	-	-	-	-	-	-	-	-	-	-	-	-	10	-	116	100			
51		-	-	3	1	2	3	1	-	-	-	-	-	-	-	-	-	-	10	-	139	91			
54		-	-	-	2	7	1	-	-	-	-	-	-	-	-	-	-	-	10	-	146	109			
57		-	-	-	1	6	3	-	-	-	-	-	-	-	-	-	-	-	10	-	100	91			
60		-	-	-	-	3	4	2	1	-	-	-	-	-	-	-	-	-	10	-	100	91			
63		-	-	-	-	6	4	-	-	-	-	-	-	-	-	-	-	-	10	-	57	62			
66		-	-	-	-	5	1	1	1	-	-	1	1	-	-	-	-	-	10	-	38	44			
69		-	-	-	-	-	-	2	3	1	3	-	-	-	1	-	-	-	10	-	21	38			
72		-	-	-	-	-	5	1	-	-	2	-	1	-	1	-	-	-	10	-	15	24			
75		-	-	-	-	1	1	1	2	-	-	-	-	1	-	-	-	-	6	-	8	11			
78		-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	3	-	5	5			
81		-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	4	5			
84		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2			
87		-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	2	2			
90		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4			
93		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
96		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
99		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
102		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
105		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
108		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
111		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
114		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
117		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-			
120		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
123		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	2			
126		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
129		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
132		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
135		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-			
Total No. of Ages Read		3	9	27	12	34	22	8	7	3	6	1	3	1	2	1	1	1	141						
Serial Numbers (lengths only): 37, 41, 44		No. of Age Samples ¹																							
		Number of fish measured each month																				-	950	550	
		Mean length of fish (cm) each month																				-	54.0	53.9	
		Mean weight of fish (kg) each month																				-	-	-	
		Total weight caught or landed (tons) each month																				-	1826	1208	
		Estimated number caught or landed (whole numbers) each month																				-	-	-	
		Range of depths (m) each month																				-	210-300	240-300	
Mesh size (mm)																				-	114	114			

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	21	Total
Jul	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug	12	54	221	127	317	162	45	23	8	11	4	7	1	4	1	2	1	1000
Sep	14	64	242	126	280	145	44	29	11	18	5	9	2	6	2	2	1	1000

¹ Serial numbers of age samples with lengths: 36, 38, 39, 40, 42, 43, 44

TABLE 35
(cont'd)

AGE/LENGTH TABLE - COD - 2J - 1964 (4th QUARTER)

GEAR		Otter Trawl (Commercial)																			
CATCHES OR LANDINGS		Catches after discard																			
COUNTRY		Portugal																			
TONNAGE		1287.6																			
STRUCTURES USED IN AGE DETERMINATION		Otoliths																			
Length Group (3 cm)	Age	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
																		Months Within Quarter			
															Oct			Nov	Dec		
33		-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-		
36		3	4	3	-	-	-	-	-	-	-	-	-	-	-	10	31	-	-		
39		-	2	6	2	-	-	-	-	-	-	-	-	-	-	10	66	-	-		
42		-	2	4	3	1	-	-	-	-	-	-	-	-	-	10	76	-	-		
45		-	1	4	4	1	-	-	-	-	-	-	-	-	-	10	76	-	-		
48		-	1	1	5	3	-	-	-	-	-	-	-	-	-	10	106	-	-		
51		-	-	-	2	6	2	-	-	-	-	-	-	-	-	10	104	-	-		
54		-	-	2	1	3	4	-	-	-	-	-	-	-	-	10	130	-	-		
57		-	-	-	3	4	3	-	-	-	-	-	-	-	-	10	123	-	-		
60		-	-	-	-	6	4	-	-	-	-	-	-	-	-	10	114	-	-		
63		-	-	-	-	3	2	2	1	1	-	1	-	-	-	10	63	-	-		
66		-	-	-	-	3	3	2	1	-	1	-	-	-	-	10	42	-	-		
69		-	-	-	-	-	3	2	1	2	-	1	-	1	-	10	36	-	-		
72		-	-	-	-	1	2	3	2	1	-	-	-	-	1	10	9	-	-		
75		-	-	-	-	-	2	2	1	1	1	-	1	-	-	8	9	-	-		
78		-	-	-	-	-	-	-	1	1	1	-	-	-	1	4	4	-	-		
81		-	-	-	-	-	-	-	-	1	1	-	-	-	-	2	4	-	-		
84		-	-	-	-	-	-	-	1	1	-	-	1	-	-	3	3	-	-		
87		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
90		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-		
93		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
96		-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1	-	-		
99		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
102		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
105		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
108		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
111		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
114		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
117		-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-		
Total No. of Ages Read		3	10	21	20	31	25	11	7	8	4	4	2	1	1	2	150	999			
Serial Numbers (lengths only): 50,52,55,60,63		No. of Age Samples ¹																			
X		Number of fish measured each month															2225	-	-		
		Mean length of fish (cm) each month															54.3	-	-		
		Mean weight of fish (kg) each month															-	-	-		
		Total weight caught or landed (tons) each month															6570	-	-		
		Estimated number caught or landed (whole numbers) each month															-	-	-		
		Range of depths (m) each month															180-345	-	-		
		Mesh size (mm)															114	-	-		

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
Oct	9	59	146	190	298	195	37	19	14	8	13	2	4	0	2	996
Nov	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ Serial numbers of age samples with lengths: 46, 47, 49, 51, 53, 54, 58, 59, 61, 62, 64

TABLE 36

AGE/LENGTH TABLE - COD - 3K - 1964 (1st QUARTER)

GEAR		Otter Trawl (Commercial)													
CATCHES OR LANDINGS		Catches after discard													
COUNTRY		Portugal													
TONNAGE		1287.6													
STRUCTURES USED IN AGE DETERMINATION		Otoliths													
Length Group (3 cm)	Age	5	6	7	8	9	10	11	12	13	16	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
													Months Within Quarter		
													Jan	Feb.	Mar
39		4	-	1	-	-	-	-	-	-	-	5	-	-	20
42		9	1	-	-	-	-	-	-	-	-	10	-	-	56
45		1	8	-	1	-	-	-	-	-	-	10	-	-	160
48		2	3	5	-	-	-	-	-	-	-	10	-	-	188
51		-	1	7	2	-	-	-	-	-	-	10	-	-	160
54		-	3	5	2	-	-	-	-	-	-	10	-	-	132
57		-	2	5	3	-	-	-	-	-	-	10	-	-	128
60		-	-	4	5	-	-	-	-	1	-	10	-	-	48
63		-	-	5	4	-	-	1	-	-	-	10	-	-	40
66		-	-	1	1	-	-	2	-	-	-	4	-	-	16
69		-	-	1	-	1	1	-	-	-	1	4	-	-	16
72		-	-	1	1	5	-	1	-	-	-	8	-	-	32
75		-	-	-	-	-	-	-	-	-	-	-	-	-	-
78		-	-	-	-	-	-	-	-	-	-	-	-	-	-
81		-	-	-	-	-	-	-	1	-	-	1	-	-	4
													-	-	1000
Total No. of Ages Read		16	18	35	19	6	1	4	1	1	1	102	X		
Serial Numbers		Serial No. of Age Samples with lengths:2,3,4													
X		Number of fish measured each month											-	-	250
		Mean length of fish (cm) each month											-	-	53.1
		Mean weight of fish (kg) each month											-	-	-
		Total weight caught or landed (tons) each month											-	-	4288
		Estimated number caught or landed (whole numbers) each month											-	-	-
		Range of depths (m) each month											-	-	329-402
		Mesh size (mm)											-	-	114

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	5	6	7	8	9	10	11	12	13	16	Total
Jan	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-
Mar	120	271	391	161	24	4	16	4	5	4	1000

TABLE 36
(cont'd)

AGE/LENGTH TABLE - COD - 3K - 1964 (3rd QUARTER)

GEAR		Otter Trawl (Commercial)																		
CATCHES OR LANDINGS		Catches after discard																		
COUNTRY		Portugal																		
TONNAGE		1287.6																		
STRUCTURES USED IN AGE DETERMINATION		Otoliths																		
Length Group (3 cm)	Age	3	4	5	6	7	8	9	10	11	12	13	14	15	17	18	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
																		Months Within Quarter		
																	Jul	Aug	Sep	
36		4	5	1	-	-	-	-	-	-	-	-	-	-	-	-	10	-	21	31
39		1	8	1	-	-	-	-	-	-	-	-	-	-	-	-	10	-	41	57
42		-	5	5	-	-	-	-	-	-	-	-	-	-	-	-	10	-	55	79
45		-	-	9	1	-	-	-	-	-	-	-	-	-	-	-	10	-	78	69
48		-	-	6	2	2	-	-	-	-	-	-	-	-	-	-	10	-	110	97
51		-	-	2	6	2	-	-	-	-	-	-	-	-	-	-	10	-	126	107
54		-	-	-	4	6	-	-	-	-	-	-	-	-	-	-	10	-	165	142
57		-	-	-	-	4	5	1	-	-	-	-	-	-	-	-	10	-	134	124
60		-	-	-	1	4	5	-	-	-	-	-	-	-	-	-	10	-	117	127
63		-	-	-	3	5	2	-	-	-	-	-	-	-	-	-	10	-	70	69
66		-	-	-	1	1	5	2	1	-	-	-	-	-	-	-	10	-	37	34
69		-	-	-	-	2	-	2	1	1	-	1	1	1	1	-	10	-	18	27
72		-	-	-	-	1	4	2	-	1	1	-	-	-	-	1	10	-	12	17
75		-	-	-	-	1	-	4	1	2	1	1	-	-	-	-	10	-	6	10
78		-	-	-	-	-	1	1	-	1	-	-	-	-	-	-	3	-	5	4
81		-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	2	-	2	2
84		-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	2	-	1	1
87		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
90		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
93		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
96		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
99		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
102		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
105		-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	2	-
Total No. of Ages Read		5	18	24	18	28	22	12	3	7	4	2	1	2	1	1	148	X		
Serial Numbers (lengths only): 53,55,57,59,62,66		No. of Age Samples ¹														X				
X		Number of fish measured each month																-	1100	1973
		Mean length of fish (cm) each month																-	54.7	54.4
		Mean weight of fish (kg) each month																-	-	-
		Total weight caught or landed (tons) each month																-	9873	2261
		Estimated number caught or landed (whole numbers) each month																-	-	-
		Range of depths (m) each month																-	220-400	210-300
		Mesh size (mm)																-	114	114

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	10	11	12	13	14	15	17	18	Total
Jul	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug	13	71	195	208	291	164	31	6	7	3	2	2	4	2	1	1000
Sep	18	101	191	185	273	164	32	7	9	4	4	3	3	3	2	999

¹ Serial numbers of age samples with lengths: 49, 51, 52, 54, 56, 58, 60, 61, 63, 64, 65, 67, 68, 69

TABLE 37

AGE/LENGTH TABLE - COD - 3L - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Commercial)																				Total No. of Ages Read		LENGTH COMPOSITION PER MILLE		
CATCHES OR LANDINGS		Catches after discard																								
COUNTRY		Portugal																								
TONNAGE		1287.6																								
STRUCTURES USED IN AGE DETERMINATION		Otoliths																								
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	23	Total No. of Ages Read	Months Within Quarter					
																					Apr	May	Jun			
39		6	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	15	-	6			
42		3	8	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	30	-	40			
45		4	6	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	35	-	75			
48		1	6	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	35	-	111			
51		-	2	10	7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	20	90	-	116			
54		1	3	9	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	20	100	-	114			
57		-	1	6	8	5	-	-	-	-	-	-	-	-	-	-	-	-	-	20	115	-	114			
60		-	2	4	9	3	2	-	-	-	-	-	-	-	-	-	-	-	-	20	125	-	107			
63		-	-	2	7	10	1	-	-	-	-	-	-	-	-	-	-	-	-	20	70	-	95			
66		-	-	3	4	4	4	1	2	-	-	-	1	-	-	-	-	-	-	19	45	-	54			
69		-	-	-	3	7	6	2	-	1	-	1	-	-	-	-	-	-	-	20	55	-	40			
72		-	-	-	2	4	4	7	2	-	1	-	-	-	-	-	-	-	-	20	50	-	24			
75		-	-	1	-	2	7	3	1	2	1	-	-	-	1	-	-	-	-	18	40	-	15			
78		-	-	-	1	2	5	4	2	2	2	1	-	-	-	-	-	-	-	19	45	-	13			
81		-	-	-	-	-	5	7	3	2	-	-	-	-	-	-	-	-	-	17	35	-	15			
84		-	-	-	-	-	2	6	2	2	1	2	-	-	-	-	-	-	-	15	25	-	9			
87		-	-	-	-	1	4	2	3	2	1	2	1	-	-	1	-	-	-	17	35	-	8			
90		-	-	-	-	-	-	1	3	1	2	-	2	1	1	-	1	-	-	12	15	-	7			
93		-	-	-	-	1	1	2	2	3	2	1	1	-	1	-	-	-	-	14	20	-	10			
96		-	-	-	-	-	-	-	1	3	4	1	-	-	1	-	-	-	-	10	-	-	7			
99		-	-	-	-	-	-	-	-	6	1	1	-	-	1	-	-	-	-	9	-	-	5			
102		-	-	-	-	-	-	-	-	2	1	2	1	1	1	3	-	-	-	11	5	-	4			
105		-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	1	-	5	5	-	3			
108		-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	1	-	4	-	-	2			
111		-	-	-	-	-	-	-	-	-	1	1	1	-	-	1	-	-	-	4	-	-	1			
114		-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	5	-	-			
117		-	-	-	-	-	-	-	-	-	-	2	1	-	3	-	-	-	-	6	5	-	2			
120		-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	2	-	-	1			
123		-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	2	-	-	1			
126		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
129		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
132		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
135		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
138		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
141		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-			
Total No. of Ages Read		15	30	53	52	41	41	35	21	26	19	19	10	3	11	5	1	2	1	385	1000 - 999					
Serial Numbers (lengths only): 26,29,32,34,38,41		No. of Age Samples ¹																								
X	Number of fish measured each month																			200	-	3136				
	Mean length of fish (cm) each month																			64.8	-	59.8				
	Mean weight of fish (kg) each month																			-	-	-				
	Total weight caught or landed (tons) each month																			6056	-	10095				
	Estimated number caught or landed (whole numbers) each month																			-	-	-				
	Range of depths (m) each month																			274-280	-	112-243				
Mesh size (mm)																			114	-	114					

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	23	Total
Apr	31	86	203	225	144	104	72	39	30	20	19	8	1	13	3	1	1	0	1000
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jun	41	132	262	253	138	61	33	20	18	12	11	7	2	5	2	1	1	0	999

¹ Serial numbers of age samples with lengths: 5, 6, 24, 25, 27, 28, 30, 31, 33, 35, 37, 39, 40, 42

TABLE 38

LENGTH FREQUENCIES - HADDOCK - 3N - 1964

(FREQUENCIES IN ‰ - 2 CM GROUPS)

GEAR	Otter Trawl	
	(Commercial)	
CATCHES/LANDINGS	Landings After Discard	
MONTH	February	March
COUNTRY	Canada (Newfoundland)	
TONNAGE	151-500	
28-29	-	43
30-31	5	23
32-33	10	43
34-35	24	50
36-37	52	222
38-39	99	222
40-41	63	112
42-43	51	63
44-45	82	40
46-47	133	35
48-49	130	63
50-51	112	35
52-53	96	29
54-55	59	11
56-57	42	3
58-59	24	3
60-61	9	3
62-63	3	-
64-65	3	-
66-67	-	-
68-69	-	-
70-71	1	-
72-73	1	-
74-75	1	-
Total ‰	1000	1000
Serial Numbers	-	-
Number of Samples	4	1
Number of Fish Measured	1143	347
Mean Length (cm)	46.70	39.79
Mean Weight (kg)	1.11	0.61
Total Weight Landed (tons)	197	27
Estimated Number Landed	177300	44614
Mesh(mm) or Hook(no.) Size	4 1/2 ¹	4 1/2 ²
Range of Depths (fm)	100-180	110-190

¹ mesh size: inches - manilla and nylon² mesh size: inches - manilla

TABLE 39

LENGTH FREQUENCIES - HADDOCK - 30 - 1964

(FREQUENCIES IN ‰ - CM GROUPS)

GEAR	Otter Trawl				
	(Commercial)				(Research)
CATCHES/LANDINGS	Landings After Discard				Catches
MONTH	January	March	May	September	July
COUNTRY	Canada (Newfoundland)				Poland
TONNAGE	151-500				796
18-19	-	-	-	-	1
20-21	-	-	-	-	9
22-23	-	-	-	-	10
24-25	-	-	1	-	46
26-27	1	-	-	1	122
28-29	5	2	1	11	221
30-31	12	3	17	63	252
32-33	26	5	21	189	181
34-35	71	35	69	252	52
36-37	159	146	163	152	34
38-39	149	200	197	71	27
40-41	89	159	107	66	19
42-43	49	78	54	78	11
44-45	63	86	54	55	4
46-47	68	58	74	27	2
48-49	93	96	60	12	1
50-51	80	51	67	9	3
52-53	55	26	37	3	3
54-55	36	20	38	4	-
56-57	24	15	22	4	1
58-59	9	7	9	2	1
60-61	8	3	4	-	-
62-63	1	3	1	-	-
64-65	2	2	1	-	-
66-67	1	5	1	-	-
Total ‰	1001	1000	998	999	1000
Serial Numbers	-	-	-	-	-
Number of Samples	5	1	3	6	-
Number of Fish Measured	1782	604	1120	2365	858
Mean Length (cm)	43.00	42.60	42.24	36.86	30.8
Mean Weight (kg)	0.85	0.81	0.77	0.53	-
Total Weight Landed (tons)	856	350	392	874	-
Estimated Number Landed	1010193	432311	511106	1653608 ⁴	-
Mesh(mm) or Hook(no.) Size	4 $\frac{1}{2}$ -4 $\frac{1}{2}$ ¹	- ²	4 $\frac{1}{2}$ -4 $\frac{1}{2}$ ³	-	70
Range of Depths (fm)	55-140	120-200	50-100	68-110	66

1 inches (manilla and nylon)

2 large (manilla)

3 inches (manilla)

4 large (manilla and nylon)

TABLE 40 LENGTH FREQUENCIES - HADDOCK - 4T - 1964

(FREQUENCIES IN % - CM GROUPS)

GEAR	Otter Trawl
CATCHES/LANDINGS	(Commercial)
MONTH	Landings
COUNTRY	July
TONNAGE	Canada (Maritimes)
	26-50
42-43	11
44-45	51
46-47	97
48-49	112
50-51	134
52-53	119
54-55	108
56-57	97
58-59	69
60-61	61
62-63	47
64-65	29
66-67	25
68-69	14
70-71	4
72-73	11
74-75	4
76-77	-
78-79	7
Total %	1000
Serial Numbers	45
Number of Samples	1
Number of Fish Measured	277
Mean Length (cm)	54.1
Mean Weight (kg)	1.57
Total Weight Landed (tons)	-
Estimated Number Landed	-
Mesh(mm) or Hook(no.) Size	4 1/2 ¹
Range of Depths (fm)	53-64

¹ inches

TABLE 41 LENGTH FREQUENCIES - HADDOCK - 4vs - 1964

(FREQUENCIES IN ‰ - CM GROUPS)

GEAR	Otter Trawl
CATCHES/LANDINGS	(Commercial)
MONTH	Landings
COUNTRY	June
TONNAGE	Canada (Maritimes)
	151-500
36-37	6
38-39	19
40-41	19
42-43	81
44-45	137
46-47	99
48-49	100
50-51	131
52-53	115
54-55	98
56-57	90
58-59	42
60-61	27
62-63	22
64-65	7
66-67	2
68-69	2
70-71	-
72-73	2
Total ‰	999
Serial Numbers	46
Number of Samples	1
Number of Fish Measured	270
Mean Length (cm)	50.2
Mean Weight (kg)	1.22
Total Weight Landed (tons)	-
Estimated Number Landed	-
Mesh(mm) or Hook(no.) Size	4 1/2 ¹
Range of Depths (fm)	30-45

¹ inches

TABLE 42

LENGTH FREQUENCIES - HADDOCK - 4W - 1964

(FREQUENCIES IN ‰ - 2 CM GROUPS)

GEAR	Otter Trawl								
	(Commercial)								(Research)
CATCHES/LANDINGS	Landings								Catches
MONTH	March	April	May	May ¹	June	September	October	December	July
COUNTRY	Canada (Maritimes)								Poland
TONNAGE	151-500			26-50	151-500			796	
12-13	-	-	-	-	-	-	-	-	4
14-15	-	-	-	-	-	-	-	-	31
16-17	-	-	-	-	-	-	-	-	92
18-19	-	-	-	-	-	-	-	-	54
20-21	-	-	-	-	-	-	-	-	46
22-23	-	-	-	-	-	-	-	-	88
24-25	-	-	-	-	-	-	-	-	92
26-27	-	-	-	-	-	-	-	-	88
28-29	-	-	-	-	-	-	-	-	23
30-31	-	-	-	-	-	-	-	-	36
32-33	-	-	-	-	-	-	-	-	27
34-35	-	1	1	-	-	-	-	-	33
36-37	-	6	4	-	1	-	1	20	42
38-39	6	15	15	-	9	21	3	64	37
40-41	47	48	23	-	19	58	19	82	27
42-43	51	85	52	1	83	96	52	95	42
44-45	68	104	64	7	93	109	65	121	44
46-47	142	124	119	14	98	138	89	113	27
48-49	149	120	148	28	105	130	92	98	52
50-51	120	109	140	70	108	121	156	99	33
52-53	91	104	103	121	124	101	150	83	22
54-55	109	85	91	118	97	44	117	78	20
56-57	101	69	86	133	93	70	112	54	14
58-59	58	46	53	100	64	41	75	35	8
60-61	34	27	41	159	29	19	28	15	8
62-63	18	21	28	107	18	16	23	15	2
64-65	5	15	15	59	25	19	9	19	6
66-67	-	12	10	44	23	9	9	4	-
68-69	-	6	2	7	4	9	-	4	-
70-71	-	2	-	7	3	-	-	-	2
72-73	-	1	2	7	4	-	-	-	-
74-75	-	-	-	11	-	-	-	-	-
76-77	-	-	-	7	-	-	-	-	-
78-79	-	-	-	-	-	-	-	-	-
80-81	-	-	2	-	-	-	-	-	-
Total ‰	999	1000	999	1000	1000	1001	1000	999	1000
Serial Numbers	47-53	54-67	68-70	76	71-72	73	74	75	-
Number of Samples	7	14	3	1	2	1	1	1	-
Number of Fish Measured	1982	4189	810	369	617	275	422	398	481
Mean Length (cm)	50.6	50.1	51.2	57.9	51.5	49.5	51.8	48.3	32.3
Mean Weight (kg)	1.48	1.31	1.42	2.04	1.36	1.26	1.40	1.23	-
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	4 $\frac{1}{2}$ -4 $\frac{3}{4}$ ²	4 $\frac{1}{2}$ -4 $\frac{3}{4}$ ²	4 $\frac{3}{4}$ ²	4 $\frac{1}{2}$ ²	4 $\frac{1}{2}$ -4 $\frac{3}{4}$ ²	4 $\frac{3}{4}$ ²	4 $\frac{1}{2}$ ²	4 $\frac{1}{2}$ ²	100
Range of Depths (fm)	70-75	45-90	50-90	80-90	28-38	23-28	25-30	25-32	66-219

¹ St. Esprit Area - this sample not comparable to other 4W samples

² Mesh size - inches

GEAR	Otter Trawl								
	(Commercial)								
CATCHES/LANDINGS	Landings								
	January	March	April	May	June	July	August	September	October
COUNTRY	Canada (Maritimes)								
TONNAGE	51-150 and 151-500 unweighted								
26-27	-	-	-	-	-	-	-	-	2
28-29	-	-	-	-	-	-	-	-	2
30-31	-	-	-	6	2	4	-	14	2
32-33	-	-	-	-	5	4	4	64	20
34-35	-	-	-	6	26	14	-	115	47
36-37	-	-	9	6	35	20	14	96	84
38-39	-	3	16	66	52	59	23	83	107
40-41	45	18	39	55	52	61	23	87	66
42-43	54	33	70	28	71	84	41	92	64
44-45	159	100	85	61	101	100	77	41	40
46-47	171	118	104	83	178	92	64	60	73
48-49	191	169	81	94	167	92	104	41	80
50-51	135	136	102	138	84	98	86	64	80
52-53	104	126	118	88	77	100	141	73	91
54-55	64	90	115	99	59	81	114	64	69
56-57	37	56	104	83	23	41	73	64	38
58-59	19	46	78	88	26	41	86	18	47
60-61	14	28	43	17	14	20	23	5	24
62-63	3	36	22	33	16	33	59	5	15
64-65	2	23	8	11	2	22	41	-	22
66-67	-	10	4	28	5	18	14	14	20
68-69	2	3	1	-	2	8	9	-	2
70-71	-	3	1	11	2	4	-	-	4
72-73	-	-	-	-	-	-	-	-	-
74-75	-	-	-	-	-	4	4	-	2
76-77	-	3	-	-	-	-	-	-	-
Total %	1000	1001	1000	1001	999	1000	1000	1000	1001
Serial Numbers	77	78-79	80-83	84	85-86	87-88	89	90	91-93
Number of Samples	1	2	4	1	2	2	1	1	3
Number of Fish Measured	371	390	1440	181	426	509	220	218	549
Mean Length (cm)	48.7	51.3	51.0	50.9	47.3	49.3	52.3	44.0	47.2
Mean Weight (kg)	1.31	1.57	1.49	1.43	1.18	1.33	1.65	1.04	1.40
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	4 $\frac{1}{2}$ ¹	4 $\frac{1}{2}$ ¹	4 $\frac{1}{2}$ -4 $\frac{5}{8}$ ¹	3 $\frac{7}{8}$ ¹	4 $\frac{1}{4}$ -4 $\frac{1}{2}$ ¹	4 $\frac{1}{4}$ -4 $\frac{1}{2}$ ¹	4 $\frac{1}{2}$ ¹	4 $\frac{1}{2}$ ¹	4 $\frac{1}{4}$ -4 $\frac{5}{8}$ ¹
Range of Depths (fm)	50-70	-	50-65	40-50	40-60	30-60	40-50	40-50	35-50

1 Mesh size - inches

TABLE 43
(cont'd)

LENGTH FREQUENCIES - HADDOCK - 4X - 1964

(FREQUENCIES IN % - 2 CM GROUPS)

GEAR	Otter Trawl	Long-line				
	(Research)	(Commercial)				
CATCHES/LANDINGS	Catches	Landings				
MONTH	July	April	May	June	October	November
COUNTRY	Poland	Canada (Maritimes)				
TONNAGE	796	0-25, 26-50, 51-150 unweighted				
12-13	24	-	-	-	-	-
14-15	161	-	-	-	-	-
16-17	387	-	-	-	-	-
18-19	214	-	-	-	-	-
20-21	81	-	-	-	-	-
22-23	49	-	-	-	-	-
24-25	15	-	-	-	-	-
26-27	9	-	-	-	-	-
28-29	5	-	-	-	-	-
30-31	3	-	-	-	-	-
32-33	7	-	-	-	-	2
34-35	6	-	-	2	-	10
36-37	7	-	-	7	15	11
38-39	5	-	-	12	10	21
40-41	7	9	4	22	25	30
42-43	8	17	4	77	20	48
44-45	2	36	20	113	60	75
46-47	1	57	33	133	95	122
48-49	2	88	89	150	135	154
50-51	2	74	120	173	160	180
52-53	2	95	122	101	155	113
54-55	2	117	113	63	155	90
56-57	-	78	169	37	95	55
58-59	-	128	131	35	25	38
60-61	-	98	87	25	10	34
62-63	1	69	47	37	15	8
64-65	-	50	13	-	5	5
66-67	-	38	33	5	-	2
68-69	-	24	4	-	10	-
70-71	-	5	11	8	10	2
72-73	-	12	-	-	-	-
74-75	-	5	-	-	-	-
Total %/oo	1000	1000	1000	1000	1000	1000
Serial Numbers	-	94-95	96-98	99-101	102	103
Number of Samples	-	2	3	3	1	1
Number of Fish Measured	1266	420	549	600	200	622
Mean Length (cm)	18.6	55.8	55.2	49.8	51.2	49.8
Mean Weight (kg)	-	1.90	2.00	1.49	1.90	1.75
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	70	6/0	16	16	16	6/0
Range of Depths (fm)	120	50-55	50	50	30-40	40-50

GEAR	Otter Trawl
CATCHES/LANDINGS	(Commercial)
MONTH	Landings
COUNTRY	July
TONNAGE	Canada (Maritimes)
	51-150
30-31	7
32-33	7
34-35	-
36-37	7
38-39	29
40-41	29
42-43	43
44-45	36
46-47	86
48-49	122
50-51	108
52-53	144
54-55	101
56-57	58
58-59	72
60-61	79
62-63	43
64-65	14
66-67	7
68-69	7
Total ‰	999
Serial Numbers	104
Number of Samples	1
Number of Fish Measured	139
Mean Length (cm)	51.7
Mean Weight (kg)	1.63
Total Weight Landed (tons)	-
Estimated Number Landed	-
Mesh(mm) or Hook(no.) Size	4 1/8 ¹
Range of Depths (fm)	30-50

¹ Mesh size - inches

TABLE 45

LENGTH FREQUENCIES - HADDOCK - 5Z - 1964

(FREQUENCIES IN ‰ - 2 CM GROUPS)

GEAR	Otter Trawl					
	(Commercial)					(Research)
CATCHES/LANDINGS	Landings					Catches
MONTH	February	March	April	July	October	July
COUNTRY	Canada (Maritimes)					Poland
TONNAGE	151-500					796
18-19	-	-	-	-	-	4
20-21	-	-	-	-	-	33
22-23	-	-	-	-	-	102
24-25	-	-	-	-	-	62
26-27	-	-	-	-	-	37
28-29	-	-	-	-	-	13
30-31	-	-	-	-	-	7
32-33	-	-	-	-	1	-
34-35	-	-	-	8	-	1
36-37	-	-	1	11	29	2
38-39	9	1	8	47	80	2
40-41	35	2	14	83	195	2
42-43	48	4	36	97	192	6
44-45	64	9	74	160	114	-
46-47	67	13	117	125	48	-
48-49	92	17	110	96	23	1
50-51	73	43	133	97	33	1
52-53	91	49	133	60	45	1
54-55	83	66	94	84	37	9
56-57	71	104	93	36	43	6
58-59	86	104	86	36	40	13
60-61	53	123	43	18	49	20
62-63	46	95	25	21	27	36
64-65	53	66	12	15	19	31
66-67	45	85	13	6	17	52
68-69	28	95	3	-	5	79
70-71	25	38	2	-	1	62
72-73	23	38	1	-	-	106
74-75	3	28	-	-	1	88
76-77	1	10	-	-	-	96
78-79	2	10	-	-	1	59
80-81	-	-	1	-	-	28
82-83	1	-	-	-	-	30
84-85	-	-	1	-	-	9
86-87	-	-	-	-	-	2
Total ‰	999	1000	1000	1000	1000	1000
Serial Numbers	105	106	107-110	111	112	-
Number of Samples	1	1	4	1	1	-
Number of Fish Measured	1382	190	1041	351	1184	989
Mean Length (cm)	54.7	61.3	52.0	48.1	47.0	58.9
Mean Weight (kg)	2.02	2.64	1.55	1.26	1.26	-
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	4 $\frac{1}{2}$ ¹	4 $\frac{1}{2}$ ¹	4 $\frac{1}{2}$ -4 $\frac{1}{2}$ ¹	4 $\frac{1}{2}$ ¹	4 $\frac{1}{2}$ ¹	70
Range of Depths (fm)	40-60	48-50	40-50	40-50	40-60	27-49

1 Mesh size - inches

TABLE 46

AGE/LENGTH TABLE - HADDOCK - 4X - 1964 (1st QUARTER)

GEAR		Otter Trawl (Commercial)													
CATCHES OR LANDINGS		Landings													
COUNTRY		United States													
TONNAGE		51-483													
STRUCTURES USED IN AGE DETERMINATION		Otoliths													
Length Group ($\frac{1}{2}$ cm)	Age	3	4	5	6	7	8	9	10	11	12	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
													Months Within Quarter	Jan	Feb
38	-	1	2	-	-	-	-	-	-	-	3	3	6	5	
40	-	4	0	-	-	-	-	-	-	-	4	24	32	15	
42	1	2	4	-	-	-	-	-	-	-	7	58	64	35	
44	-	10	19	4	1	1	-	-	-	-	35	313	159	117	
46	-	1	19	5	2	-	-	-	-	-	27	117	99	143	
48	-	3	16	7	0	-	-	-	-	-	26	105	145	116	
50	-	1	9	9	12	1	-	-	-	-	32	91	150	112	
52	-	1	16	12	7	1	2	-	-	-	39	88	111	97	
54	-	0	9	10	9	8	7	3	0	1	47	72	90	87	
56	-	1	5	9	7	16	3	1	2	0	44	41	65	91	
58	-	-	3	3	3	9	4	3	4	0	29	33	36	60	
60	-	-	-	3	4	2	2	3	3	2	19	23	24	37	
62	-	-	-	3	0	5	2	5	1	1	17	15	12	41	
64	-	-	-	1	1	2	0	2	1	2	9	8	4	22	
66	-	-	-	1	0	0	0	0	0	1	2	6	2	10	
68	-	-	-	-	-	1	-	-	-	-	1	2	1	3	
70	-	-	-	-	-	-	-	1	-	1	2	1	-	4	
72	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
74	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
Total No. of Ages Read		1	24	102	67	46	46	20	18	11	8	343			
Serial Numbers		No. of Age Samples 14													
X	Number of fish measured each month												492	651	955
	Mean length of fish (cm) each month												48.87	49.70	51.54
	Mean weight of fish (kg) each month												1.13	1.15	1.34
	Total weight caught or landed (tons) each month												681	841	1055
	Estimated number caught or landed (whole numbers) each month (100's)												6015	7123	7867
	Range of depths (m) each month												50-90	50-85	30-120
Mesh size (mm)												114	114	114	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	10	11	12	Total
Jan	8	152	437	176	98	60	28	20	11	9	999
Feb	9	128	401	194	124	72	33	18	12	8	999
Mar	5	85	363	201	119	99	41	40	22	20	995

TABLE 46
(cont'd)

AGE/LENGTH TABLE - HADDOCK - 4X - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Commercial)													
CATCHES OR LANDINGS		Landings													
COUNTRY		United States													
TONNAGE		51-483													
STRUCTURES USED IN AGE DETERMINATION		Otoliths													
Length Group (3 cm)	Age	4	5	6	7	8	9	10	11	12	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
												Months Within Quarter			
												Apr	May	Jun	
36		1	3	-	-	-	-	-	-	-	4	1	-	-	
38		0	6	1	-	-	-	-	-	-	7	5	3	-	
40		2	8	1	-	-	-	-	-	-	11	30	6	-	
42		3	11	3	-	-	-	-	-	-	17	62	40	-	
44		-	21	2	-	-	-	-	-	-	23	123	90	-	
46		-	24	4	-	1	-	-	-	-	29	134	146	-	
48		-	19	2	-	1	-	-	-	-	22	124	130	-	
50		-	16	7	4	4	-	-	1	-	32	136	115	-	
52		-	5	5	4	3	1	-	1	-	19	85	90	-	
54		-	8	7	3	5	2	1	0	-	26	64	73	-	
56		-	5	7	5	10	6	3	2	3	41	73	77	-	
58		-	6	4	3	7	4	4	1	1	30	66	61	-	
60		-	3	10	6	4	2	3	4	0	32	40	46	-	
62		-	0	2	4	5	5	5	2	3	26	26	64	-	
64		-	1	-	2	4	2	3	1	3	16	17	38	-	
66		-	-	-	0	0	3	1	2	3	9	6	17	-	
68		-	-	-	0	0	1	0	0	0	1	4	3	-	
70		-	-	-	1	1	-	0	0	1	3	3	3	-	
72		-	-	-	-	-	-	1	1	-	2	1	-	-	
Total No. of Ages Read		6	136	55	32	45	26	21	15	14	350	1000	1002	-	
Serial Numbers		No. of Age Samples										14			
	Number of fish measured each month											1112	330	-	
	Mean length of fish (cm) each month											50.68	52.26	-	
	Mean weight of fish (kg) each month											1.18	1.52	-	
	Total weight caught or landed (tons) each month											2538	620	250	
	Estimated number caught or landed (whole numbers) each month (100's)											21463	4064	-	
	Range of depths (m) each month											35-110	32-65	-	
	Mesh size (mm)											114	114	114	
AGE COMPOSITIONS OF LANDINGS (PER MILLE)															
Month	4	5	6	7	8	9	10	11	12	Total					
Apr	16	533	160	72	100	45	30	24	16	996					
May	8	479	158	80	115	59	42	31	30	1002					

TABLE 46
(cont'd)

AGE/LENGTH TABLE - HADDOCK - 4X - 1964 (3rd QUARTER)

GEAR		Otter Trawl (Commercial)															
CATCHES OR LANDINGS		Landings															
COUNTRY		United States															
TONNAGE		51-483															
STRUCTURES USED IN AGE DETERMINATION		Otoliths															
Length Group (2 cm)	Age	2	3	4	5	6	7	8	9	10	11	12	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
														Months Within Quarter			
														Jul	Aug	Sep	
30		5	-	-	-	-	-	-	-	-	-	-	5	-	-	-	
32		6	2	-	-	-	-	-	-	-	-	-	8	-	-	-	
34		9	1	-	-	-	-	-	-	-	-	-	10	-	-	-	
36		6	10	-	-	-	-	-	-	-	-	-	16	-	-	-	
38		2	9	-	2	-	-	-	-	-	-	-	13	7	-	-	
40		2	9	5	2	-	-	-	-	-	-	-	18	22	-	17	
42		-	9	9	5	-	-	-	-	-	-	-	23	43	-	34	
44		-	9	8	5	-	-	-	-	-	-	-	22	180	-	51	
46		-	7	11	7	2	-	-	-	-	-	-	27	144	-	67	
48		-	1	6	15	0	-	-	-	-	-	-	22	137	-	100	
50		-	-	7	14	1	-	-	-	-	-	-	22	72	-	133	
52		-	-	4	14	2	-	-	-	-	-	-	20	80	-	178	
54		-	-	5	17	2	-	-	-	-	-	-	24	57	-	134	
56		-	-	1	13	9	-	-	1	-	-	-	24	53	-	101	
58		-	-	-	7	5	-	1	1	-	-	-	15	64	-	44	
60		-	-	-	8	3	3	2	0	-	-	-	16	47	-	61	
62		-	-	-	3	5	1	1	1	1	-	3	15	39	-	26	
64		-	-	-	1	3	3	1	3	3	-	0	14	39	-	22	
66		-	-	-	-	3	-	1	1	0	-	1	6	8	-	13	
68		-	-	-	-	1	-	-	-	1	-	3	5	8	-	4	
70		-	-	-	-	-	-	-	-	-	-	0	0	-	-	4	
72		-	-	-	-	-	-	-	-	-	-	1	1	-	-	4	
74		-	-	-	-	-	-	-	-	-	1	1	2	-	-	0	
76		-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
Total No. of Ages Read		32	58	56	113	36	7	6	7	5	1	10	331	1000	-	997	
Serial Numbers		No. of Age Samples												13			
	Number of fish measured each month													204	-	200	
	Mean length of fish (cm) each month													50.91	-	52.93	
	Mean weight of fish (kg) each month													1.20	-	1.39	
	Total weight caught or landed (tons) each month													399	343	179	
	Estimated number caught or landed (whole numbers) each month (100's)													3323	-	1291	
	Range of depths (m) each month													50-60	-	75-118	
Mesh size (mm)													114	114	114		

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	2	3	4	5	6	7	8	9	10	11	12	Total
Jul	29	163	237	418	105	20	17	18	13	1	18	1039
Aug	-	-	-	-	-	-	-	-	-	-	-	-
Sep	30	86	201	526	125	18	16	16	8	0	16	1042

TABLE 47

AGE/LENGTH TABLE - HADDOCK - 5Y - 1964 (1st QUARTER)

GEAR		Otter Trawl (Commercial)										
CATCHES OR LANDINGS		Landings										
COUNTRY		United States										
TONNAGE		0-310										
STRUCTURES USED IN AGE DETERMINATION		Scales										
Length Group (2 cm)	Age	3	4	5	6	7	8	9	Total No. of Ages Read	LENGTH COMPOSITION PER MILE		
										Months Within Quarter		
										Jan	Feb	Mar
36		-	-	-	-	-	-	-	-	9	-	-
38		-	-	-	-	-	-	-	-	17	-	5
40		3	1	0	-	-	-	-	4	43	-	38
42		0	0	0	-	-	-	-	0	0	-	44
44		3	4	3	0	-	-	-	10	103	-	33
46		-	0	4	0	-	-	-	4	129	-	77
48		-	3	5	1	0	-	-	9	134	-	102
50		-	2	4	1	0	-	-	7	81	-	138
52		-	-	8	2	0	-	-	10	170	-	169
54		-	-	1	3	0	-	-	4	51	-	139
56		-	-	2	2	1	0	0	5	71	-	95
58		-	-	-	4	1	0	0	5	61	-	45
60		-	-	-	4	1	0	0	5	56	-	32
62		-	-	-	1	0	0	1	2	15	-	25
64		-	-	-	1	0	-	1	2	15	-	38
66		-	-	-	-	1	-	0	1	15	-	13
68		-	-	-	-	-	-	1	1	15	-	6
70		-	-	-	-	-	-	-	-	10	-	-
72		-	-	-	-	-	-	-	-	0	-	-
74		-	-	-	-	-	-	-	-	5	-	-
Total No. of Ages Read		6	10	27	19	4	0	3	69	1000	-	999
Serial Numbers		No. of Age Samples 4										
X		Number of fish measured each month								154	-	165
		Mean length of fish (cm) each month								51.59	-	52.30
		Mean weight of fish (kg) each month								1.33	-	1.24
		Total weight caught or landed (tons) each month								342	393	164
		Estimated number caught or landed (whole numbers) each month (100's)								2570	-	1328
		Range of depths (m) each month								60-70	-	50-90
		Mesh size (mm)								114	114	114

AGE COMPOSITIONS OF LANDINGS (PER MILE)

Month	3	4	5	6	7	8	9	Total
Jan	63	120	457	235	53	0	29	957
Feb	-	-	-	-	-	-	-	-
Mar	38	96	431	300	47	0	37	949

TABLE 47
(cont'd)

AGE/LENGTH TABLE - HADDOCK - 5Y - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Commercial)											
CATCHES OR LANDINGS		Landings											
COUNTRY		United States											
TONNAGE		0-310											
STRUCTURES USED IN AGE DETERMINATION		Scales											
Length Group (2 cm)	Age	3	4	5	6	7	8	9	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
		Months Within Quarter			Apr	May	Jun						
40	-	-	-	-	-	-	-	-	-	5	-	-	
42	1	-	-	-	-	-	-	-	1	13	-	9	
44	2	-	-	5	1	-	-	-	8	34	-	53	
46	1	2	-	5	0	-	-	-	8	78	-	44	
48	0	4	-	6	2	-	-	-	12	110	-	106	
50	1	2	-	12	4	2	-	-	21	169	-	141	
52	1	5	-	7	1	0	-	-	14	134	-	64	
54	-	3	-	7	2	1	-	-	13	140	-	113	
56	-	3	-	6	2	0	-	-	11	90	-	96	
58	-	1	-	2	3	4	-	-	10	81	-	84	
60	-	1	-	1	1	1	2	-	6	45	-	106	
62	-	-	-	1	2	1	0	1	5	36	-	56	
64	-	-	-	4	1	0	1	0	6	24	-	39	
66	-	-	-	1	1	0	-	0	2	18	-	45	
68	-	-	-	-	0	1	-	1	2	12	-	11	
70	-	-	-	-	0	1	-	0	1	6	-	17	
72	-	-	-	-	1	-	-	1	2	-	-	6	
74	-	-	-	-	-	-	-	-	-	-	-	11	
Total No. of Ages Read		6	21	57	21	11	3	3	122	995	-	1001	
Serial Numbers		No. of Age Samples 2											
X	Number of fish measured each month										354	-	150
	Mean length of fish (cm) each month										53.55	-	55.47
	Mean weight of fish (kg) each month										1.32	-	1.56
	Total weight caught or landed (tons) each month										843	543	175
	Estimated number caught or landed (whole numbers) each month (100's)										6366	-	1127
	Range of depths (m) each month										35-60	-	50-60
	Mesh size (mm)										114	114	114

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	3	4	5	6	7	8	9	Total
Apr	49	193	468	161	86	19	13	989
May	-	-	-	-	-	-	-	-
Jun	40	159	434	189	107	42	19	990

TABLE 47
(cont'd)

AGE/LENGTH TABLE - HADDOCK - 5Y - 1964 (3rd QUARTER)

GEAR		Otter Trawl (Commercial)												
CATCHES OR LANDINGS		Landings												
COUNTRY		United States												
TONNAGE		0-310												
STRUCTURES USED IN AGE DETERMINATION		Scales												
Length Group (2 cm)	Age	2	3	4	5	6	7	8	9	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
											Months Within Quarter	Jul	Aug.	Sep
36		1	-	-	-	-	-	-	-	1	-	-	-	
38		0	1	-	-	-	-	-	-	1	-	-	6	
40		4	1	1	-	-	-	-	-	6	-	-	23	
42		8	1	0	-	-	-	-	-	9	-	24	55	
44		4	8	0	1	-	-	-	-	13	-	20	78	
46		1	6	5	1	1	-	-	-	14	-	67	55	
48		-	5	10	1	0	-	-	-	16	-	84	99	
50		-	2	10	3	2	-	-	-	17	-	139	93	
52		-	2	10	6	1	1	-	-	20	-	110	120	
54		-	-	2	10	1	0	-	-	13	-	131	92	
56		-	-	7	13	0	0	1	1	22	-	92	103	
58		-	-	5	8	2	1	0	0	16	-	78	107	
60		-	-	2	8	0	0	0	0	10	-	84	62	
62		-	-	1	4	3	1	1	1	11	-	84	53	
64		-	-	-	-	1	2	0	-	3	-	27	24	
66		-	-	-	-	-	-	0	-	0	-	30	15	
68		-	-	-	-	-	-	0	-	0	-	6	6	
70		-	-	-	-	-	-	1	-	1	-	15	8	
72		-	-	-	-	-	-	-	-	-	-	9	-	
Total No. of Ages Read		18	26	53	55	11	5	3	2	173	- 1000 1000			
Serial Numbers		No. of Age Samples									10			
X	Number of fish measured each month										-	300	450	
	Mean length of fish (cm) each month										-	54.98	53.04	
	Mean weight of fish (kg) each month										-	1.55	1.40	
	Total weight caught or landed (tons) each month										328	357	401	
	Estimated number caught or landed (whole numbers) each month (100's)										-	2303	2869	
	Range of depths (m) each month										-	50-100	45-50	
Mesh size (mm)										-	114	114		

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	2	3	4	5	6	7	8	9	Total
Jul	-	-	-	-	-	-	-	-	-
Aug	32	97	311	361	78	36	27	12	954
Sep	92	142	297	323	63	34	18	10	979

TABLE 47
(cont'd)

AGE/LENGTH TABLE - HADDOCK - 5Y - 1964 (4th QUARTER)

GEAR		Otter Trawl (Commercial)												
CATCHES OR LANDINGS		Landings												
COUNTRY		United States												
TONNAGE		0-310												
STRUCTURES USED IN AGE DETERMINATION		Scales												
Length Group (2 cm)	Age	2	3	4	5	6	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE						
								Months Within Quarter						
								Oct	Nov	Dec				
34		2	-	-	-	-	2	-	-	-				
36		1	-	-	-	-	1	-	-	-				
38		4	-	-	-	-	4	31	-	-				
40		2	1	-	-	-	3	93	-	-				
42		0	1	1	-	-	2	154	-	-				
44		0	1	0	-	-	1	51	-	-				
46		1	1	0	-	-	2	103	-	-				
48		-	0	0	-	-	0	51	-	-				
50		-	0	1	-	-	1	42	-	-				
52		-	1	0	-	-	2	11	-	-				
54		-	-	3	2	1	6	75	-	-				
56		-	-	1	2	0	3	65	-	-				
58		-	-	1	2	1	4	124	-	-				
60		-	-	1	1	-	2	49	-	-				
62		-	-	-	1	-	1	81	-	-				
64		-	-	-	1	-	1	27	-	-				
66		-	-	-	-	-	-	27	-	-				
68		-	-	-	-	-	-	11	-	-				
70		-	-	-	-	-	-	5	-	-				
								1000	-	-				
Total No. of Ages Read		10	5	8	9	3	35	X						
Serial Numbers		No. of Age Samples 2												
X	Number of fish measured each month											140	-	-
	Mean length of fish (cm) each month											51.41	-	-
	Mean weight of fish (kg) each month											1.36	-	-
	Total weight caught or landed (tons) each month											522	396	254
	Estimated number caught or landed (whole numbers) each month (100's)											3842	-	-
	Range of depths (m) each month											45-65	-	-
Mesh size (mm)											114	114	114	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	2	3	4	5	6	Total
Oct	144	216	234	263	50	907
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-

TABLE 48

AGE/LENGTH TABLE - HADDOCK - 5Z - 1964 (1st QUARTER)

GEAR		Otter Trawl (Commercial)												
CATCHES OR LANDINGS		Landings												
COUNTRY		United States												
TONNAGE		0-483												
STRUCTURES USED IN AGE DETERMINATION		Scales												
Length Group (2 cm)	Age	2	3	4	5	6	7	8	9+	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
											Months Within Quarter	Jan	Feb	Mar
34		2	-	-	-	-	-	-	-	2	-	1	1	
36		7	3	-	1	-	-	-	-	11	5	2	2	
38		15	3	-	0	-	-	-	-	18	16	12	6	
40		20	14	2	2	-	-	-	-	38	27	27	13	
42		11	21	5	4	2	0	-	-	43	28	40	35	
44		2	23	16	21	1	0	-	-	63	37	50	53	
46		-	21	28	19	0	0	-	-	68	49	58	94	
48		-	21	34	31	8	0	-	-	94	63	96	92	
50		-	7	24	38	11	2	0	-	82	78	89	93	
52		-	2	22	44	18	6	0	-	92	99	80	108	
54		-	0	13	39	28	7	1	1	89	91	95	90	
56		-	1	10	40	27	7	2	1	88	82	113	86	
58		-	1	2	39	36	6	4	2	90	84	94	87	
60		-	-	4	23	37	9	2	3	78	88	68	72	
62		-	-	1	15	30	12	6	4	68	80	60	52	
64		-	-	-	8	18	7	6	2	41	54	34	35	
66		-	-	-	6	12	7	7	6	38	31	26	27	
68		-	-	-	-	8	9	2	6	25	31	20	22	
70		-	-	-	-	4	5	0	5	14	23	11	12	
72		-	-	-	-	-	1	5	14	20	16	12	9	
74		-	-	-	-	-	-	1	4	5	14	7	7	
76		-	-	-	-	-	-	0	4	4	1	3	2	
78		-	-	-	-	-	-	1	-	1	3	1	1	
80		-	-	-	-	-	-	-	-	-	-	1	1	
82		-	-	-	-	-	-	-	-	-	-	-	1	
Total No. of Ages Read		57	117	161	330	241	78	37	52	1073				
Serial Numbers		No. of Age Samples									62			
X	Number of fish measured each month										2011	2473	2210	
	Mean length of fish (cm) each month										55.83	54.39	54.26	
	Mean weight of fish (kg) each month										1.72	1.53	1.43	
	Total weight caught or landed (tons) each month										1805	3153	4925	
	Estimated number caught or landed (whole numbers) each month (100's)										10492	20562	34339	
	Range of depths (m) each month										25-140	32-140	32-145	
Mesh size (mm)										114	114	114		

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	2	3	4	5	6	7	8	9	Total
Jan	38	82	133	308	252	87	42	58	1000
Feb	38	101	156	327	232	71	32	43	1000
Mar	25	105	173	332	223	70	30	39	997

TABLE 48
(cont'd)

AGE/LENGTH TABLE - HADDOCK - 5Z - 1964 (2nd QUARTER)

GEAR		Otter Trawl (Commercial)																				
CATCHES OR LANDINGS		Landings																				
COUNTRY		United States																				
TONNAGE		0-483																				
STRUCTURES USED IN AGE DETERMINATION		Scales																				
Length Group (2 cm)	Age	2	3	4	5	6	7	8	9	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE											
											Months Within Quarter											
											Apr	May	Jun									
32		-	-	-	-	-	-	-	-	-	-	-	2	3								
34		1	-	-	-	-	-	-	-	1	1	6	5									
36		9	1	-	-	-	-	-	-	10	1	9	17									
38		23	3	1	-	-	-	-	-	27	12	42	41									
40		30	16	5	3	-	-	-	-	54	34	60	85									
42		22	14	7	4	1	-	-	-	48	33	94	67									
44		10	22	9	16	3	-	-	-	60	49	56	78									
46		3	18	16	26	11	2	-	-	76	71	89	64									
48		3	18	21	37	10	1	-	-	90	93	87	76									
50		1	9	15	33	9	2	2	1	72	96	93	83									
52		-	5	19	18	16	1	1	1	61	96	70	75									
54		-	1	10	27	12	5	2	2	59	88	54	72									
56		-	0	12	27	26	9	2	2	78	90	50	67									
58		-	1	5	39	20	10	6	7	88	94	50	60									
60		-	-	5	33	35	11	7	8	99	74	50	54									
62		-	-	4	17	22	11	3	2	59	61	49	44									
64		-	-	-	9	23	8	5	3	48	35	33	34									
66		-	-	-	3	13	8	8	6	38	26	32	24									
68		-	-	-	2	4	11	5	7	29	16	22	21									
70		-	-	-	1	2	4	5	10	22	12	20	9									
72		-	-	-	-	-	4	6	8	18	5	13	10									
74		-	-	-	-	-	1	4	7	12	9	10	7									
76		-	-	-	-	1	-	-	5	6	1	5	2									
78		-	-	-	-	-	-	-	1	1	2	4	1									
80		-	-	-	-	-	-	-	-	-	-	1	0									
82		-	-	-	-	-	-	-	-	-	-	-	1									
Total No. of Ages Read											102	108	129	295	208	88	56	70	1056			
Serial Numbers											No. of Age Samples 63											
X											Number of fish measured each month			2417	2204	2170						
											Mean length of fish (cm) each month			54.13	52.23	51.68						
											Mean weight of fish (kg) each month			1.42	1.27	1.30						
											Total weight caught or landed (tons) each month			4570	4427	5044						
											Estimated number caught or landed (whole numbers) each month (100's)			32263	34803	38900						
											Range of depths (m) each month			35-130	18-130	18-112						
Mesh size (mm)											114	114	114									

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	2	3	4	5	6	7	8	9	Total
Apr	61	97	145	317	207	76	44	48	995
May	143	129	135	263	165	68	42	56	1001
Jun	153	128	134	268	166	66	38	42	995

TABLE 48
(cont'd)

AGE/LENGTH TABLE - HADDOCK - 5Z - 1964 (3rd QUARTER)

GEAR		Otter Trawl (Commercial)														
CATCHES OR LANDINGS		Landings														
COUNTRY		United States														
TONNAGE		0-483														
STRUCTURES USED IN AGE DETERMINATION		Scales														
Length Group (2 cm)	Age	2	3	4	5	6	7	8	9	10	11	12	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE		
														Months Within Quarter		
													Jul	Aug	Sep	
34		2	-	-	-	-	-	-	-	-	-	-	2	5	-	2
36		9	-	-	-	-	-	-	-	-	-	-	9	22	10	15
38		51	-	-	-	-	-	-	-	-	-	-	51	71	57	59
40		87	2	1	-	-	-	-	-	-	-	-	90	141	114	115
42		110	4	1	-	-	-	-	-	-	-	-	115	151	159	171
44		97	7	2	-	-	-	-	-	-	-	-	106	128	169	169
46		53	11	2	2	-	-	-	-	-	-	-	68	74	117	105
48		18	6	7	6	-	-	-	-	-	-	-	37	62	62	60
50		5	12	4	11	3	1	-	-	-	-	-	36	61	51	36
52		2	29	12	21	8	2	-	-	-	-	-	74	53	38	29
54		1	13	21	24	11	2	-	-	-	-	-	72	42	41	31
56		-	9	34	23	11	5	2	-	-	-	-	84	35	41	29
58		-	3	23	27	13	3	1	1	1	-	-	72	30	43	33
60		-	-	12	33	23	3	1	0	1	-	-	73	29	30	37
62		-	-	6	22	11	1	2	1	0	-	-	43	24	25	30
64		-	-	-	6	17	6	0	2	0	-	-	31	23	16	15
66		-	-	-	6	11	8	3	2	0	-	-	27	16	11	14
68		-	-	-	1	10	7	2	0	1	-	-	22	15	5	14
70		-	-	-	1	3	5	1	4	0	1	-	16	8	4	12
72		-	-	-	-	1	2	-	1	1	0	-	6	5	2	8
74		-	-	-	-	-	2	-	3	-	2	1	8	3	2	7
76		-	-	-	-	-	-	-	1	-	-	0	1	0	1	7
78		-	-	-	-	-	-	-	-	-	-	1	1	1	1	1
80		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Total No. of Ages Read		435	96	125	183	122	47	12	15	4	3	2	1044			
Serial Numbers		No. of Age Samples 62														
X	Number of fish measured each month													2258	2121	2069
	Mean length of fish (cm) each month													47.95	47.83	48.34
	Mean weight of fish (kg) each month													1.08	1.07	1.12
	Total weight caught or landed (tons) each month													3299	3472	2573
	Estimated number caught or landed (whole numbers) each month (100's)													30598	32435	22970
	Range of depths (m) each month													20-130	18-142	15-140
Mesh size (mm)													114	114	114	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	2	3	4	5	6	7	8	9	10	11	12	Total
Jul	593	92	78	115	70	28	9	9	5	1	1	1001
Aug	614	95	83	111	58	20	6	7	2	1	1	998
Sep	622	80	70	102	65	29	7	18	2	3	2	1000

TABLE 48
(cont'd)

AGE/LENGTH TABLE - HADDOCK - 5Z - 1964 (4th QUARTER)

GEAR		Otter Trawl (Commercial)													
CATCHES OR LANDINGS		Landings													
COUNTRY		United States													
TONNAGE		0-483													
STRUCTURES USED IN AGE DETERMINATION		Scales													
Length Group (2 cm)	Age	1	2	3	4	5	6	7	8	9	Total No. of Ages Read	LENGTH COMPOSITION PER MILLE			
												Months Within Quarter	Oct	Nov	Dec
32	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
34	2	1	-	-	-	-	-	-	-	-	3	4	4	2	
36	-	4	-	-	-	-	-	-	-	-	4	10	16	10	
38	-	26	-	-	-	-	-	-	-	-	26	63	40	38	
40	-	52	1	-	-	-	-	-	-	-	53	126	88	90	
42	-	53	1	-	-	-	-	-	-	-	54	184	143	141	
44	-	56	5	1	-	1	-	-	-	-	63	173	148	148	
46	-	43	11	2	2	0	-	-	-	-	58	120	116	101	
48	-	32	13	4	2	0	-	-	-	-	51	71	105	69	
50	-	17	20	10	5	3	-	-	-	-	55	44	74	61	
52	-	5	19	23	9	2	-	-	-	-	58	25	41	54	
54	-	1	13	12	17	6	-	-	-	-	49	28	30	46	
56	-	-	7	15	22	11	1	-	-	-	56	26	30	43	
58	-	-	1	16	26	7	3	1	-	-	54	28	25	32	
60	-	-	-	7	27	30	2	2	-	-	68	26	32	29	
62	-	-	-	6	20	21	6	4	-	-	57	21	24	32	
64	-	-	-	2	6	24	11	0	3	-	46	16	23	26	
66	-	-	-	-	8	5	14	7	1	-	35	13	15	24	
68	-	-	-	-	5	9	10	2	3	-	29	9	14	21	
70	-	-	-	-	1	2	6	3	6	-	18	5	11	9	
72	-	-	-	-	-	5	3	5	2	-	15	4	9	6	
74	-	-	-	-	-	1	4	3	3	-	11	2	4	6	
76	-	-	-	-	-	-	1	2	2	-	5	1	4	6	
78	-	-	-	-	-	-	-	1	2	-	3	1	3	4	
80	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Total No. of Ages Read		2	290	91	98	150	127	61	30	22	871				
Serial Numbers		No. of Age Samples 59													
	Number of fish measured each month											2052	1971	1830	
	Mean length of fish (cm) each month											47.05	48.84	49.75	
	Mean weight of fish (kg) each month											1.06	1.20	1.28	
	Total weight caught or landed (tons) each month											2973	2300	2267	
	Estimated number caught or landed (whole numbers) each month (100's)											28078	19220	17701	
	Range of depths (m) each month											20-115	25-110	26-125	
	Mesh size (mm)											114	114	114	

AGE COMPOSITIONS OF LANDINGS (PER MILLE)

Month	1	2	3	4	5	6	7	8	9	Total
Oct	3	684	95	59	72	52	22	11	8	1006
Nov	3	595	119	72	85	65	30	17	14	1000
Dec	1	550	112	81	104	83	37	18	16	1002

GEAR	Otter Trawl (Exploratory)								
	Catches								
CATCHES/LANDINGS	May			June			July		
MONTH	USSR								
COUNTRY	<i>S. mentella</i>								
SPECIES OR TYPE	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
SEX	1800								
TONNAGE	1800								
24	-	-	-	-	-	-	1	-	1
25	2	1	3	-	-	-	3	2	5
26	2	4	6	-	-	-	3	5	8
27	7	5	12	-	-	-	2	5	7
28	5	8	13	-	-	-	6	11	17
29	3	4	7	-	1	1	6	8	14
30	17	19	36	3	3	6	16	27	43
31	22	15	37	4	1	5	15	15	30
32	48	38	86	3	6	9	25	26	51
33	60	45	105	7	8	15	44	30	74
34	104	85	189	12	14	26	52	39	91
35	123	105	228	30	25	55	108	77	185
36	50	55	105	26	19	45	74	36	110
37	23	32	55	17	37	54	68	24	92
38	11	14	25	19	26	45	62	31	93
39	9	9	18	4	50	54	30	18	48
40	5	19	24	1	121	122	31	38	69
41	2	11	13	1	150	151	7	18	25
42	3	8	11	1	78	79	4	7	11
43	1	5	6	3	77	80	2	8	10
44	-	3	3	-	93	93	1	5	6
45	2	8	10	1	75	76	1	6	7
46	-	2	2	-	33	33	-	1	1
47	-	4	4	-	17	17	-	2	2
48	-	1	1	-	15	15	-	-	-
49	-	-	-	-	10	10	-	-	-
50	-	1	1	-	7	7	-	-	-
51	-	-	-	-	1	1	-	-	-
52	-	-	-	-	-	-	-	-	-
53	-	-	-	-	1	1	-	-	-
Total ‰	499	501	1000	132	868	1000	561	439	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-	-	-	-
Number of Fish Measured	1820	1822	3642	98	627	725	3248	2626	5874
Mean Length (cm)	34.1	35.11	34.60	35.98	41.44	40.69	35.46	35.43	35.45
Mean Weight (kg)	-	-	-	-	-	-	0.70	0.75	0.72
Total Weight Landed (tons)	-	-	88.0	-	-	121.0	-	-	197.0
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	110	-	-	110	-	-	110
Range of Depths (fm)	-	-	100-325	-	-	137-150	-	-	157-300

TABLE 49
(cont'd)

LENGTH FREQUENCIES - REDFISH - 2J - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Exploratory)								
	Catches								
CATCHES/LANDINGS	July			July			July		
MONTH	Iceland								
COUNTRY	<i>S. mentella</i>						<i>S. marinus</i>		
SPECIES OR TYPE	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
SEX	491								
TONNAGE									
25	-	9	9	-	-	-	-	-	-
26	9	-	9	-	-	-	-	-	-
27	9	18	27	3	6	9	-	-	-
28	27	36	63	16	-	16	-	-	-
29	27	45	72	9	6	15	-	-	-
30	9	82	91	16	6	22	-	-	-
31	18	91	109	9	25	34	-	-	-
32	-	55	55	25	19	44	-	-	-
33	55	64	119	22	19	41	24	49	73
34	27	36	63	69	57	126	-	-	-
35	64	55	119	69	72	141	24	25	49
36	36	91	127	53	60	113	24	25	49
37	27	27	54	50	41	91	-	24	24
38	18	9	27	35	19	54	24	25	49
39	-	9	9	44	22	66	24	25	49
40	9	9	18	31	31	62	-	-	-
41	-	-	-	19	25	44	24	25	49
42	-	9	9	13	31	44	24	25	49
43	-	18	18	6	9	15	-	-	-
44	-	-	-	-	19	19	24	25	49
45	-	-	-	-	13	13	-	24	24
46	-	-	-	3	6	9	24	49	73
47	-	-	-	-	3	3	-	-	-
48	-	-	-	-	-	-	24	25	49
49	-	-	-	-	-	-	-	-	-
50	-	-	-	-	9	9	-	24	24
51	-	-	-	-	-	-	49	73	122
52	-	-	-	-	-	-	49	73	122
53	-	-	-	-	-	-	24	49	73
54	-	-	-	-	-	-	24	25	49
55	-	-	-	-	-	-	-	-	-
56	-	-	-	-	-	-	-	24	24
57	-	-	-	-	3	3	-	-	-
58	-	-	-	-	-	-	-	-	-
59	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-	-	-
63	-	-	-	-	3	3	-	-	-
Total ‰	335	663	998	492	504	996	386	614	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	1	-	-	2	-	-	1
Number of Fish Measured	37	73	110	157	161	318	15	26	41
Mean Length (cm)	33.30	32.89	33.08	35.68	37.07	36.38	44.13	48.27	46.76
Mean Weight (kg)	-	-	-	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	-	-	-	-	-	-	-
Range of Depths (fm)	-	-	176-190	-	-	190-220 ¹	-	-	174-178

¹ Only a part of one haul was made at a depth less than 200 fm.

TABLE 49
(cont'd)

LENGTH FREQUENCIES - REDFISH - 2J - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Exploratory)								
	Catches								
CATCHES/LANDINGS	July			September			October		
MONTH	Iceland			USSR					
COUNTRY	<i>S. marinus</i>			<i>S. mentella</i>					
SPECIES OR TYPE	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
SEX	491			1800					
TONNAGE									
23	3	-	3	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-
25	3	-	3	1	1	2	1	1	2
26	9	3	12	2	3	5	2	1	3
27	23	3	26	6	10	16	4	5	9
28	20	20	40	6	8	14	5	5	10
29	35	26	61	5	12	17	4	4	8
30	49	29	78	14	14	28	8	8	16
31	35	43	78	16	11	27	5	7	12
32	23	49	72	29	14	43	13	11	24
33	9	61	70	26	30	56	16	10	26
34	14	93	107	47	35	82	27	19	46
35	17	84	101	94	79	173	60	51	111
36	6	55	61	76	61	137	52	32	84
37	6	52	58	56	59	115	49	45	94
38	12	26	38	35	61	96	75	87	162
39	6	17	23	15	42	57	44	54	98
40	3	26	29	7	54	61	46	70	116
41	3	29	32	1	17	18	22	37	59
42	-	26	26	1	19	20	12	26	38
43	3	17	20	-	14	14	7	24	31
44	-	20	20	-	4	4	4	13	17
45	-	12	12	-	7	7	5	15	20
46	-	12	12	-	4	4	1	7	8
47	-	6	6	-	2	2	1	3	4
48	-	12	12	-	2	2	-	1	1
49	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	1	1
Total ‰	279	721	1000	437	563	1000	463	537	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	2	-	-	-	-	-	-
Number of Fish Measured	96	249	345	991	1276	2267	2564	2998	5562
Mean Length (cm)	31.28	35.72	34.50	34.82	36.51	34.77	36.88	38.11	37.54
Mean Weight (kg)	-	-	-	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	29.0	-	-	524.0
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	-	-	-	110	-	-	110
Range of Depths (fm)	-	-	172-180	-	-	100-200	-	-	150-350

TABLE 49
(cont'd)

LENGTH FREQUENCIES - REDFISH - 2J - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl					
	(Exploratory)					
CATCHES/LANDINGS	Catches					
MONTH	November			December		
COUNTRY	USSR					
SPECIES OR TYPE	<i>S. mentella</i>					
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	1800					
24	1	1	2	-	-	-
25	2	3	5	-	-	-
26	6	1	7	-	-	-
27	6	3	9	-	-	-
28	6	6	12	2	-	2
29	6	6	12	-	-	-
30	12	12	24	2	-	2
31	7	11	18	3	3	6
32	14	9	23	6	4	10
33	31	17	48	11	8	19
34	35	14	49	13	7	20
35	80	51	131	34	20	54
36	85	36	121	44	21	65
37	76	40	116	44	20	64
38	82	44	126	46	20	66
39	54	40	94	35	17	52
40	25	62	87	78	47	125
41	8	32	40	38	43	81
42	4	12	16	36	56	92
43	5	15	20	25	44	69
44	3	9	12	16	34	50
45	1	11	12	15	65	80
46	-	6	6	4	48	52
47	-	4	4	-	32	32
48	1	1	2	-	25	25
49	-	1	1	-	13	13
50	-	2	2	-	16	16
51	-	1	1	-	2	2
52	-	-	-	-	3	3
Total ‰/oo	550	450	1000	452	548	1000
Serial Numbers	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-
Number of Fish Measured	845	689	1534	1967	2396	4363
Mean Length (cm)	35.98	37.59	36.71	38.81	42.34	40.75
Mean Weight (kg)	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	1.0	-	-	10.0
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	110	-	-	110
Range of Depths (fm)	-	-	140-375	-	-	140-375

TABLE 50 LENGTH FREQUENCIES - REDFISH - 3K - 1964
(cont'd)

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Exploratory)								
	Catches						NK		
CATCHES/LANDINGS	July			July			January		
MONTH	Iceland						USSR		
COUNTRY	<i>S. marinus</i>						<i>S. mentella</i>		
SPECIES OR TYPE	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
SEX	491						1800		
TONNAGE									
21	-	-	-	-	-	-	-	1	1
22	-	-	-	-	2	2	-	1	1
23	-	-	-	2	-	2	2	2	4
24	-	-	-	-	2	2	5	2	7
25	-	1	1	7	4	11	8	2	10
26	1	1	2	7	-	7	11	3	14
27	1	1	2	9	2	11	17	15	32
28	-	3	3	-	9	9	9	3	12
29	3	1	4	15	11	26	4	5	9
30	3	1	4	4	4	8	10	4	14
31	7	5	12	4	11	15	6	11	17
32	4	7	11	35	7	42	10	9	19
33	15	12	27	52	18	70	11	9	20
34	22	11	33	35	29	64	23	6	29
35	19	15	34	77	26	103	28	21	49
36	20	4	24	66	33	99	44	17	61
37	26	12	38	88	20	108	56	25	81
38	19	14	33	46	18	64	28	32	60
39	12	14	26	26	22	48	34	30	64
40	24	22	46	18	33	51	24	40	64
41	22	19	41	7	25	32	8	34	42
42	23	19	42	2	42	44	6	66	72
43	26	26	52	4	37	41	3	59	62
44	19	30	49	-	46	46	3	33	36
45	35	23	58	-	42	42	7	67	74
46	29	20	49	-	22	22	3	49	52
47	23	20	43	-	9	9	1	30	31
48	22	14	36	-	13	13	2	22	24
49	23	11	34	-	4	4	-	18	18
50	23	15	38	-	4	4	4	6	10
51	16	23	39	-	-	-	-	2	2
52	12	15	27	-	2	2	-	1	1
53	22	20	42	-	-	-	-	-	-
54	18	24	42	-	-	-	-	2	2
55	10	12	22	-	-	-	-	2	2
56	8	14	22	-	-	-	-	2	2
57	-	12	12	-	-	-	-	-	-
58	1	10	11	-	-	-	-	-	-
59	1	16	17	-	-	-	-	-	-
60	-	5	5	-	-	-	-	-	-
61	-	4	4	-	-	-	-	-	-
62	-	7	7	-	-	-	-	-	-
63	-	5	5	-	-	-	-	-	-
Total ‰	509	488	997	504	497	1001	367	631	998
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	7	-	-	3	-	-	-
Number of Fish Measured	375	361	736	229	226	455	399	684	1084
Mean Length (cm)	43.53	46.22	44.85	35.17	39.51	37.33	35.53	41.13	39.10
Mean Weight (kg)	-	-	-	-	-	-	0.79	1.36	1.17
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	4.0
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	-	-	-	-	-	-	110
Range of Depths (fm)	-	-	146-220 ¹	-	-	170-190	-	-	170-200

¹ Only a small part of one trawl was at a depth less than 150 fm and only a part of one trawl was at a depth over 200 fm.

TABLE 50
(cont'd)

LENGTH FREQUENCIES - REDFISH - 3K - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Exploratory)								
	NK			USSR			S. mentella		
CATCHES/LANDINGS	February			March			April		
MONTH									
COUNTRY	USSR								
SPECIES OR TYPE	S. mentella								
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	1800								
22	-	-	-	-	-	-	1	-	1
23	1	-	1	1	1	2	-	-	-
24	-	-	-	2	2	4	-	-	-
25	3	1	4	11	3	14	-	2	2
26	7	1	8	16	9	25	3	3	6
27	7	3	10	25	13	38	2	1	3
28	6	1	7	23	10	33	5	6	11
29	6	3	9	12	5	17	3	7	10
30	19	4	23	33	14	47	5	1	6
31	12	5	17	13	4	17	10	4	14
32	21	7	28	28	8	36	20	9	29
33	29	6	35	29	4	33	39	10	49
34	51	17	68	27	13	40	73	17	90
35	81	22	103	72	16	88	100	17	117
36	73	21	94	62	10	72	68	28	96
37	81	23	104	78	18	96	39	43	82
38	42	12	54	51	10	61	22	58	80
39	45	29	74	26	10	36	10	45	55
40	42	31	73	29	24	53	5	47	52
41	18	30	48	9	15	24	1	63	64
42	15	33	48	10	17	27	3	80	83
43	14	27	41	4	29	33	3	49	52
44	9	30	39	3	25	28	-	43	43
45	7	39	46	2	39	41	-	34	34
46	3	28	31	4	39	43	-	10	10
47	3	15	18	3	24	27	-	5	5
48	1	7	8	3	19	22	-	4	4
49	1	4	5	1	5	6	-	1	1
50	-	3	3	2	10	12	-	1	1
51	-	-	-	2	-	2	-	-	-
52	-	1	1	5	5	10	-	-	-
53	-	-	-	2	1	3	-	-	-
54	-	-	-	2	1	3	-	-	-
55	-	-	-	2	-	2	-	-	-
56	-	-	-	2	-	2	-	-	-
Total ‰	597	403	1000	594	403	997	412	588	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-	-	-	-
Number of Fish Measured	2795	1886	4681	984	672	1656	431	616	1047
Mean Length (cm)	36.33	40.48	38.02	35.29	40.47	37.41	34.90	39.77	37.75
Mean Weight (kg)	1.03	1.47	1.33	0.79	1.30	0.95	0.77	1.22	1.18
Total Weight Landed (tons)	-	-	213.0	-	-	159.0	-	-	98.0
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	110	-	-	110	-	-	110
Range of Depths (fm)	-	-	125-235	-	-	150-205	-	-	145-195

TABLE 50
(cont'd)

LENGTH FREQUENCIES - REDFISH - 3K - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Exploratory)								
	NK			USSR					
CATCHES/LANDINGS	May			June			July		
MONTH									
COUNTRY									
SPECIES OR TYPE	<i>S. mentella</i>								
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	1800								
22	-	-	-	1	-	1	-	-	-
23	-	-	-	1	-	1	-	-	-
24	-	-	-	2	1	3	-	1	1
25	2	2	4	5	5	10	-	2	2
26	3	1	4	7	7	14	-	1	1
27	7	6	13	9	9	18	1	2	3
28	7	6	13	8	6	14	2	2	4
29	6	4	10	6	5	11	3	4	7
30	24	15	39	10	8	18	3	7	10
31	17	9	26	11	10	21	11	11	22
32	31	19	50	19	14	33	8	11	19
33	35	17	52	19	14	33	16	14	30
34	52	30	82	32	22	54	22	15	37
35	97	59	156	56	37	93	45	30	75
36	49	27	76	49	34	83	51	24	75
37	51	32	83	49	40	89	69	43	112
38	24	24	48	38	38	76	54	40	94
39	14	25	39	25	34	59	25	31	56
40	8	41	49	18	48	66	25	52	77
41	3	30	33	13	41	54	9	35	44
42	2	40	42	10	40	50	9	33	42
43	2	34	36	8	48	56	9	30	39
44	1	31	32	6	32	38	3	31	34
45	1	58	59	5	51	56	6	82	88
46	-	19	19	2	20	22	-	30	30
47	-	14	14	1	15	16	-	51	51
48	-	10	10	-	7	7	-	22	22
49	-	4	4	-	3	3	-	11	11
50	-	5	5	-	1	1	-	13	13
51	-	1	1	-	-	-	-	2	2
52	-	1	1	-	-	-	-	-	-
Total ‰	436	564	1000	410	590	1000	371	630	1001
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-	-	-	-
Number of Fish Measured	5532	7139	12671	7326	10655	17981	846	1486	2332
Mean Length (cm)	34.58	39.14	37.15	35.65	39.11	37.70	36.81	40.95	39.44
Mean Weight (kg)	0.65	0.72	0.69	0.75	1.08	1.01	0.69	1.12	0.99
Total Weight Landed (tons)	-	-	56.0	-	-	10.0	-	-	33.0
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	110	-	-	110	-	-	110
Range of Depths (fm)	-	-	145-300	-	-	105-350	-	-	130-310

TABLE 50
(cont'd)

LENGTH FREQUENCIES - REDFISH - 3K - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl								
	(Exploratory)								
CATCHES/LANDINGS	NK								
MONTH	August			September			October		
COUNTRY	USSR								
SPECIES OR TYPE	<i>S. mentella</i>								
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	1800								
23	1	-	1	2	-	2	-	-	-
24	3	4	7	2	1	3	-	-	-
25	3	6	9	6	2	8	2	-	2
26	10	15	25	10	5	15	2	2	4
27	11	14	25	9	8	17	4	5	9
28	11	19	30	9	9	18	7	4	11
29	11	21	32	8	9	17	11	9	20
30	19	26	45	19	13	32	37	16	53
31	22	22	44	17	8	25	37	39	76
32	43	17	60	36	10	46	33	43	76
33	49	28	77	37	12	49	48	48	96
34	62	39	101	43	15	58	47	43	90
35	78	48	126	75	25	100	85	95	180
36	69	37	106	77	17	94	56	62	118
37	44	22	66	56	23	79	43	36	79
38	28	25	53	38	19	57	20	32	52
39	8	26	34	18	22	40	13	18	31
40	8	29	37	10	42	52	11	26	37
41	4	22	26	2	39	41	4	20	24
42	1	26	27	2	43	45	2	11	13
43	-	14	14	-	52	52	1	6	7
44	1	13	14	-	42	42	1	6	7
45	-	15	15	1	50	51	2	6	8
46	-	12	12	-	28	28	-	4	4
47	-	7	7	-	14	14	-	2	2
48	1	1	2	-	8	8	-	-	-
49	-	1	1	-	3	3	-	-	-
50	-	1	1	-	4	4	-	1	1
51	-	-	-	-	-	-	-	-	-
52	1	-	1	-	-	-	-	-	-
53	-	-	-	-	-	-	-	-	-
54	-	1	1	-	-	-	-	-	-
Total ‰	488	511	999	477	523	1000	466	534	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-	-	-	-
Number of Fish Measured	700	733	1433	1623	1484	3107	640	560	1200
Mean Length (cm)	33.97	35.85	34.93	39.77	34.39	37.21	35.39	34.16	34.82
Mean Weight (kg)	-	-	-	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	36.0	-	-	1.0	-	-	3.0
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	110	-	-	110	-	-	110
Range of Depths (fm)	-	-	155-172	-	-	135-180	-	-	155-435

TABLE 50
(cont'd)

LENGTH FREQUENCIES - REDFISH - 3K - 1964

(FREQUENCIES IN %/oo - 1 CM GROUPS)

GEAR	Otter Trawl (Exploratory)		
CATCHES/LANDINGS	NK		
MONTH	November		
COUNTRY	USSR		
SPECIES OR TYPE	<i>S. mentella</i>		
SEX	♂	♀	Tot.
TONNAGE	1800		
25	1	-	1
26	3	-	3
27	4	1	5
28	7	3	10
29	5	3	8
30	11	9	20
31	8	8	16
32	28	16	44
33	46	18	64
34	47	28	75
35	69	23	92
36	72	43	115
37	41	42	83
38	26	42	68
39	15	35	50
40	16	85	101
41	3	62	65
42	3	59	62
43	-	43	43
44	-	27	27
45	-	28	28
46	-	12	12
47	1	4	5
48	-	2	2
49	-	-	-
50	-	-	-
51	-	-	-
52	-	-	-
53	-	-	-
54	-	1	1
Total %/oo	406	594	1000
Serial Numbers	-	-	-
Number of Samples	-	-	-
Number of Fish Measured	2045	1394	3439
Mean Length (cm)	39.05	34.99	37.41
Mean Weight (kg)	-	-	-
Total Weight Landed (tons)	-	-	220.0
Estimated Number Landed	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	110
Range of Depths (fm)	-	-	155-230

TABLE 50
(cont'd)

LENGTH FREQUENCIES - REDFISH - 3K - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl								
	(Research)								
CATCHES/LANDINGS	Catches								
MONTH	June			June			July		
COUNTRY	Poland								
SPECIES OR TYPE	<i>S. marinus</i>			<i>S. mentella</i>					
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	NK								
13-18	-	-	-	-	1	1	38	24	62
19	-	-	-	1	1	2	9	11	20
20	-	-	-	1	-	1	22	7	29
21	-	-	-	1	1	2	13	15	28
22	-	-	-	2	3	5	48	50	98
23	-	-	-	4	7	11	31	35	66
24	-	-	-	4	4	8	13	52	65
25	-	-	-	6	7	13	39	66	105
26	-	-	-	9	5	14	9	37	46
27	-	-	-	7	9	16	7	24	31
28	-	-	-	3	8	11	7	22	29
20-28	4	-	4	-	-	-	-	-	-
29	2	-	2	6	4	10	2	13	15
30	-	-	-	10	8	18	11	11	22
31	2	-	2	11	9	20	6	2	8
32	6	8	14	20	19	39	17	9	26
33	4	8	12	23	23	46	4	15	19
34	10	2	12	35	33	68	15	15	30
35	10	6	16	56	43	99	37	13	50
36	4	6	10	58	34	92	13	7	20
37	25	10	35	52	47	99	13	11	24
38	8	6	14	44	41	85	13	15	28
39	12	4	16	13	29	42	4	13	17
40	27	19	46	9	31	40	-	7	7
41	14	14	28	3	33	36	-	17	17
42	27	12	39	2	52	54	-	13	13
43	23	25	48	1	44	45	-	30	30
44	14	19	33	1	39	40	-	24	24
45	21	31	52	1	36	37	-	30	30
46	21	27	48	1	21	22	-	15	15
47	19	37	56	-	11	11	-	13	13
48	19	41	60	-	6	6	-	9	9
49	16	50	66	-	3	3	-	4	4
50	8	46	54	-	3	3	-	-	-
51	8	25	33	-	1	1	-	-	-
52	12	43	55	-	-	-	-	-	-
53	6	27	33	-	-	-	-	-	-
54	4	29	33	-	-	-	-	-	-
55	2	41	43	-	-	-	-	-	-
56	-	35	35	-	-	-	-	-	-
57	-	25	25	-	-	-	-	-	-
58	4	23	27	-	-	-	-	-	-
59	-	21	21	-	-	-	-	-	-
60	-	10	10	-	-	-	-	-	-
61	2	6	8	-	-	-	-	-	-
62	2	6	8	-	-	-	-	-	-
63	-	2	2	-	-	-	-	-	-
Total ‰	336	664	1000	384	616	1000	369	631	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-	-	-	-
Number of Fish Measured	164	322	486	884	1418	2362	201	341	542
Mean Length (cm)	43.2	49.4	47.3	34.5	38.2	36.8	26.6	30.9	29.3
Mean Weight (kg)	-	-	-	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	100	-	-	100	-	-	100
Range of Depths (fm)	-	-	222	-	-	222	-	-	136

TABLE 51 LENGTH FREQUENCIES - REDFISH - 3L - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Exploratory)								
	Catches			NK			July		
CATCHES/LANDINGS				March					
MONTH	July								
COUNTRY	Iceland			USSR					
SPECIES OR TYPE	<i>S. marinus</i>			<i>S. mentella</i>					
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	491			1800					
25	-	-	-	-	-	-	1	-	1
26	-	-	-	-	-	-	3	2	5
27	-	-	-	-	-	-	3	3	6
28	-	-	-	-	-	-	1	1	2
29	6	-	6	1	-	1	2	2	4
30	6	11	17	3	-	3	5	4	9
31	-	17	17	13	5	18	5	1	6
32	28	11	39	15	8	23	12	1	13
33	28	6	34	45	11	56	12	3	15
34	28	23	51	100	8	108	35	5	40
35	68	34	102	217	28	245	58	4	62
36	40	28	68	170	20	190	75	8	83
37	62	28	90	115	11	126	79	12	91
38	45	45	90	64	13	77	57	15	72
39	17	23	40	13	28	41	62	36	98
40	11	51	62	4	45	49	42	46	88
41	6	40	46	3	32	35	22	53	75
42	-	96	96	1	10	11	9	53	62
43	-	79	79	-	9	9	7	46	53
44	6	62	68	-	6	6	8	50	58
45	-	51	51	-	-	-	4	59	63
46	-	11	11	-	1	1	1	37	38
47	-	23	23	-	1	1	1	25	26
48	-	6	6	-	-	-	-	16	16
49	-	-	-	-	-	-	-	10	10
50	-	-	-	-	-	-	-	3	3
51	-	-	-	-	-	-	-	1	1
52	-	-	-	-	-	-	-	-	-
53	-	-	-	-	-	-	-	-	-
54	-	-	-	-	-	-	-	-	-
55	-	6	6	-	-	-	-	-	-
Total ‰	351	651	1002	764	236	1000	504	496	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	1	-	-	-	-	-	-
Number of Fish Measured	62	115	177	601	185	786	1323	1300	2623
Mean Length (cm)	35.79	40.49	38.84	35.50	38.24	36.16	37.03	42.13	39.55
Mean Weight (kg)	-	-	-	-	-	-	0.87	1.27	1.05
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	33.0
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	-	-	-	110	-	-	110
Range of Depths (fm)	-	-	170-178	-	-	130-170	-	-	145-350

TABLE 51
(cont'd)

LENGTH FREQUENCIES - REDFISH - 3L - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Exploratory)								
	August			September			November		
CATCHES/LANDINGS	NK								
MONTH	USSR								
COUNTRY	<i>S. mentella</i>								
SPECIES OR TYPE									
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	1800								
21	1	1	2	-	-	-	-	-	-
22	-	-	-	1	1	2	-	-	-
23	1	-	1	-	-	-	-	-	-
24	2	3	5	1	1	2	1	-	1
25	6	5	11	2	-	2	2	1	3
26	5	5	10	5	-	5	2	1	3
27	7	11	18	4	1	5	4	5	9
28	7	13	20	6	6	12	7	3	10
29	12	16	28	6	6	12	12	5	17
30	10	23	33	10	11	21	18	12	30
31	13	20	33	13	12	25	17	14	31
32	27	22	49	32	17	49	26	17	43
33	48	17	65	40	21	61	50	17	67
34	100	34	134	52	19	71	64	19	83
35	126	28	154	63	25	88	151	28	179
36	91	23	114	101	33	134	114	19	133
37	45	15	60	75	37	112	78	16	94
38	25	24	49	42	47	89	52	23	75
39	13	31	44	19	62	81	16	17	33
40	6	47	53	7	72	79	7	56	63
41	2	38	40	3	53	56	2	30	32
42	2	34	36	3	40	43	-	24	24
43	1	18	19	1	26	27	-	21	21
44	-	12	12	-	11	11	-	14	14
45	-	6	6	-	8	8	-	19	19
46	-	2	2	-	5	5	-	8	8
47	-	1	1	-	-	-	-	5	5
48	-	1	1	-	-	-	-	2	2
49	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	1	1
Total ‰	550	450	1000	486	514	1000	623	377	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-	-	-	-
Number of Fish Measured	1403	1145	2548	2887	3301	6188	2620	1588	4208
Mean Length (cm)	34.40	36.26	35.23	35.56	38.82	37.30	34.92	38.05	36.11
Mean Weight (kg)	0.71	1.01	0.82	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	36.0	-	-	1.0	-	-	220.0
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	110	-	-	110	-	-	110
Range of Depths (fm)	-	-	140-185	-	-	160-310	-	-	125-185

TABLE 52

LENGTH FREQUENCIES - REDFISH - 3M - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl								
	(Exploratory)								
CATCHES/LANDINGS	NK								
MONTH	February			May			June		
COUNTRY	USSR								
SPECIES OR TYPE	<i>S. mentella</i>								
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	1800								
18	-	-	-	1	-	1	-	-	-
19	-	-	-	-	-	-	1	-	1
20	-	-	-	1	-	1	-	-	-
21	1	-	1	3	3	6	2	1	3
22	1	1	2	1	6	7	2	-	2
23	-	1	1	2	7	9	1	2	3
24	-	-	-	1	1	2	2	1	3
25	4	-	4	1	-	1	1	-	1
26	9	-	9	1	-	1	2	-	2
27	10	3	13	-	1	1	-	2	2
28	12	5	17	4	-	4	2	-	2
29	16	6	22	4	1	5	2	2	4
30	18	10	28	13	7	20	9	5	14
31	26	25	51	39	16	55	22	9	31
32	19	13	32	29	26	55	25	18	43
33	20	15	35	82	41	123	59	29	88
34	43	19	62	72	56	128	63	38	101
35	92	31	123	68	127	195	101	87	188
36	92	28	120	55	69	124	73	57	130
37	86	30	116	26	83	109	52	86	138
38	100	44	144	6	45	51	24	71	95
39	63	21	84	6	44	50	12	44	56
40	40	22	62	2	26	28	7	45	52
41	23	23	46	-	12	12	-	17	17
42	10	7	17	-	6	6	-	10	10
43	-	3	3	-	3	3	-	8	8
44	-	2	2	-	1	1	-	2	2
45	-	4	4	-	2	2	-	4	4
46	-	2	2	-	-	-	-	-	-
Total ‰	685	315	1000	417	583	1000	462	538	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-	-	-	-
Number of Fish Measured	656	302	958	1899	2683	4582	6094	7126	13220
Mean Length (cm)	35.71	36.18	35.84	33.62	35.43	34.68	34.53	36.43	35.55
Mean Weight (kg)	0.69	0.94	0.74	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	110	-	-	110	-	-	110
Range of Depths (fm)	-	-	170-280	-	-	160-307	-	-	145-335

TABLE 52 LENGTH FREQUENCIES - REDFISH - 3M - 1964
(cont'd)

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Exploratory)					
	August			September		
CATCHES/LANDINGS	NK					
MONTH	August			September		
COUNTRY	USSR					
SPECIES OR TYPE	<i>S. mentella</i>					
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	1800					
17	-	2	2	-	-	-
18	4	1	5	-	-	-
19	1	1	2	-	-	-
20	1	2	3	-	-	-
21	2	2	4	-	-	-
22	4	3	7	-	-	-
23	1	3	4	-	-	-
24	2	2	4	1	-	1
25	2	1	3	4	-	4
26	1	1	2	3	1	4
27	1	2	3	2	2	4
28	2	2	4	10	4	14
29	3	2	5	11	4	15
30	16	2	18	19	14	33
31	45	8	53	31	10	41
32	68	27	95	64	33	97
33	89	63	152	73	22	95
34	79	83	162	64	45	109
35	67	86	153	59	69	128
36	36	72	108	39	79	118
37	18	50	68	23	68	91
38	11	33	44	11	67	78
39	6	30	36	3	79	82
40	4	21	25	1	55	56
41	2	15	17	-	21	21
42	4	6	10	-	8	8
43	3	2	5	-	1	1
44	3	-	3	-	-	-
45	1	-	1	-	-	-
46	-	1	1	-	-	-
47	-	-	-	-	-	-
48	-	-	-	-	-	-
49	-	-	-	-	-	-
50	-	1	1	-	-	-
Total ‰	476	524	1000	418	582	1000
Serial Numbers	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-
Number of Fish Measured	1646	1812	3458	1715	2372	4087
Mean Length (cm)	33.37	35.14	34.30	33.32	36.38	35.08
Mean Weight (kg)	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	1077.0	-	-	554.0
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	110	-	-	110
Range of Depths (fm)	-	-	125-280	-	-	125-290

TABLE 52
(cont'd)

LENGTH FREQUENCIES - REDFISH - 3M - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Research)					
	Catches					
CATCHES/LANDINGS	June		Poland	June		
MONTH	June		Poland	June		
COUNTRY	June		Poland	June		
SPECIES OR TYPE	<i>S. mentella</i>			<i>S. marinus</i>		
SEX	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	NK					
14-18	15	12	27	-	-	-
19	8	4	12	-	-	-
20	8	9	17	-	-	-
21	8	12	20	-	-	-
22	18	28	46	-	-	-
23	15	29	44	-	-	-
24	13	27	40	-	-	-
25	33	34	67	-	-	-
26	38	27	65	-	-	-
27	60	25	85	-	-	-
28	62	34	96	-	-	-
20-28	-	-	-	28	19	47
29	65	31	96	9	4	13
30	38	28	66	18	13	31
31	30	23	53	14	13	27
32	33	26	59	20	10	30
33	29	22	51	16	21	37
34	28	8	36	21	21	42
35	15	14	29	26	31	57
36	6	12	18	38	26	64
37	2	16	18	25	20	45
38	1	23	24	60	31	91
39	1	10	11	39	13	52
40	1	15	16	69	13	82
41	-	1	1	52	24	76
42	-	1	1	62	17	79
43	1	-	1	28	33	61
44	-	-	-	22	22	44
45	-	-	-	12	24	36
46	-	-	-	1	14	15
47	-	-	-	1	24	25
48	-	1	1	3	22	25
49	-	-	-	1	9	10
50	-	-	-	-	9	9
51	-	-	-	1	-	1
52	-	-	-	-	1	1
Total ‰	528	472	1000	566	434	1000
Serial Numbers	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-
Number of Fish Measured	632	563	1193	431	333	764
Mean Length (cm)	28.0	28.8	28.3	37.8	39.2	38.4
Mean Weight (kg)	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	100	-	-	100
Range of Depths (fm)	-	-	150	-	-	150

GEAR	Otter Trawl (Commercial)								
	Landings								
CATCHES/LANDINGS	January			February			March		
MONTH	United States								
COUNTRY	NK								
SPECIES OR TYPE									
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	216-440								
20	-	-	-	5	5	10	-	-	-
21	-	-	-	10	10	20	-	-	-
22	10	-	10	15	10	25	-	-	-
23	50	30	80	41	20	61	-	-	-
24	70	30	100	96	51	147	-	-	-
25	120	40	160	112	30	142	10	-	10
26	120	40	160	76	56	132	-	-	-
27	110	70	180	76	46	122	20	-	20
28	30	40	70	41	20	61	-	20	20
29	50	50	100	20	30	50	10	10	20
30	10	30	40	20	46	66	10	10	20
31	-	50	50	10	41	51	10	10	20
32	-	20	20	-	46	46	20	20	40
33	-	30	30	-	25	25	30	30	60
34	-	-	-	5	15	20	60	10	70
35	-	-	-	-	5	5	90	100	190
36	-	-	-	-	10	10	70	80	150
37	-	-	-	-	-	-	70	50	120
38	-	-	-	-	5	5	80	60	140
39	-	-	-	-	-	-	-	30	30
40	-	-	-	-	-	-	-	50	50
41	-	-	-	-	-	-	-	10	10
42	-	-	-	-	-	-	-	20	20
43	-	-	-	-	-	-	-	10	10
Total %/00	570	430	1000	527	471	998	480	520	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	1	1	2	2	2	4	1	1	2
Number of Fish Measured	57	43	100	104	93	197	48	52	100
Mean Length (cm)	25.84	27.88	26.72	25.66	28.18	26.85	34.71	36.13	35.45
Mean Weight (kg)	0.28	0.34	0.30	0.27	0.36	0.31	0.61	0.68	0.65
Total Weight Landed (tons)	62	58	120	310	363	673	83	100	183
Estimated Number Landed	2256	1702	3959	11312	10116	21428	1356	1469	2825
Mesh(mm) or Hook(no.) Size	-	-	2.5	-	-	2.5	-	-	2.5
Range of Depths (fm)	-	-	151-200	-	-	101-150	-	-	151-200

TABLE 53
(cont'd)

LENGTH FREQUENCIES - REDFISH - 3N - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl					
	(Commercial)					
CATCHES/LANDINGS	Landings					
MONTH	August			October		
COUNTRY	United States					
SPECIES OR TYPE	NK					
SEX	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	216-440					
23	5	-	5	10	-	10
24	20	-	20	50	5	55
25	45	10	55	45	30	75
26	100	5	105	100	45	145
27	125	55	180	105	65	170
28	65	45	110	50	60	110
29	70	45	115	30	30	60
30	25	70	95	35	40	75
31	30	55	85	30	35	65
32	15	75	90	5	25	30
33	15	50	65	20	25	45
34	-	20	20	10	5	15
35	-	15	15	10	25	35
36	5	25	30	35	40	75
37	5	5	10	5	10	15
38	-	-	-	15	5	20
39	-	-	-	5	-	5
Total ‰	525	475	1000	560	440	1000
Serial Numbers	-	-	-	-	-	-
Number of Samples	2	2	4	1	1	2
Number of Fish Measured	105	95	200	112	88	200
Mean Length (cm)	27.74	30.68	29.14	28.50	29.85	29.09
Mean Weight (kg)	0.34	0.44	0.39	0.37	0.42	0.39
Total Weight Landed (tons)	391	463	854	137	121	258
Estimated Number Landed	11613	10507	22121	3705	2911	6616
Mesh(mm) or Hook(no.) Size	-	-	2.5	-	-	2.5
Range of Depths (fm)	-	-	151-200	-	-	151-200

TABLE 54 LENGTH FREQUENCIES - REDFISH - 30 - 1964

(FREQUENCIES IN %/oo - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)		
CATCHES/LANDINGS	Landings		
MONTH	June		
COUNTRY	United States		
SPECIES OR TYPE	NK		
SEX	♂	♀	Tot.
TONNAGE	151-440		
14	-	10	10
15	10	-	10
16	55	5	60
17	75	35	110
18	60	65	125
19	90	60	150
20	50	60	110
21	20	60	80
22	-	65	65
23	5	65	70
24	-	55	55
25	-	75	75
26	5	35	40
27	-	15	15
28	-	10	10
29	-	10	10
30	-	5	5
Total %/oo	370	630	1000
Serial Numbers	-	-	-
Number of Samples	2	2	4
Number of Fish Measured	74	126	200
Mean Length (cm)	28.27	31.81	30.50
Mean Weight (kg)	0.35	0.49	0.44
Total Weight Landed (tons)	221	745	966
Estimated Number Landed	6305	10736	17041
Mesh(mm) or Hook(no.) Size	-	-	2.5
Range of Depths (fm)	-	-	151-200

TABLE 55

LENGTH FREQUENCIES - REDFISH - 4R - 1964

(FREQUENCIES IN % - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)								
	Landings								
CATCHES/LANDINGS	July			October			November		
MONTH	Canada (Maritimes)								
COUNTRY	NK								
SPECIES OR TYPE	151-500								
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE									
18	4	-	4	4	-	4	-	-	-
19	7	-	7	37	-	37	16	-	16
20	4	-	4	49	-	49	29	-	29
21	-	-	-	19	7	26	41	-	41
22	11	-	11	52	11	63	41	-	41
23	7	-	7	56	7	63	41	8	49
24	4	-	4	41	15	56	45	12	57
25	29	-	29	56	22	78	81	12	93
26	55	-	55	86	45	131	147	33	180
27	48	-	48	37	116	153	81	86	167
28	121	-	121	30	154	184	29	126	155
29	154	26	180	15	94	109	29	86	115
30	85	37	122	-	26	26	-	20	20
31	40	40	80	4	7	11	4	-	4
32	18	110	128	-	-	-	-	-	-
33	7	66	73	-	-	-	-	4	4
34	4	55	59	-	4	4	-	4	4
35	-	26	26	-	-	-	-	4	4
36	-	11	11	-	4	4	-	4	4
37	-	7	7	-	-	-	-	4	4
38	-	4	4	-	-	-	-	12	12
39	-	7	7	-	-	-	-	-	-
40	-	7	7	-	-	-	-	-	-
41	-	4	4	-	-	-	-	-	-
Total %	598	400	998	486	512	998	584	415	999
Serial Numbers	-	-	114	-	-	115	-	-	121
Number of Samples	-	-	1	-	-	1	-	-	1
Number of Fish Measured	163	109	272	130	137	267	143	102	245
Mean Length (cm)	28.1	32.8	30.0	23.9	27.5	25.7	24.8	28.3	26.2
Mean Weight (kg)	-	-	0.55	-	-	0.40	-	-	0.38
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	4 1/2 ¹	-	-	3 ¹	-	-	4 ¹
Range of Depths (fm)	-	-	110-130	-	-	140-150	-	-	125-150

¹ Mesh size - inches

TABLE 56 LENGTH FREQUENCIES - REDFISH - 4S - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl								
	(Commercial)								
CATCHES/LANDINGS	Landings								
MONTH	July			August			NK		
COUNTRY	Canada (Maritimes)								
SPECIES OR TYPE	NK								
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	51-150								
20	5	-	5	4	-	4	3	-	3
21	5	10	15	-	-	-	-	-	-
22	10	-	10	4	-	4	3	3	6
23	-	5	5	-	-	-	-	-	-
24	-	5	5	-	-	-	-	7	7
25	10	15	25	12	4	16	3	3	6
26	15	35	50	-	-	-	3	3	6
27	30	40	70	-	13	13	3	7	10
28	15	25	40	4	4	8	3	10	13
29	5	30	35	12	-	12	10	7	17
30	5	30	35	17	4	21	10	13	23
31	5	5	10	8	-	8	7	7	14
32	5	-	5	13	-	13	7	3	10
33	15	10	25	13	-	13	20	7	27
34	40	15	55	33	-	33	47	7	54
35	65	25	90	83	-	83	67	3	70
36	105	25	130	63	-	63	70	10	80
37	70	35	105	75	17	92	80	40	120
38	60	40	100	25	42	67	47	30	77
39	5	25	30	17	63	80	14	64	78
40	15	55	70	-	71	71	7	111	118
41	-	25	25	-	117	117	-	97	97
42	-	20	20	-	100	100	-	80	80
43	-	25	25	-	79	79	-	45	45
44	-	10	10	-	50	50	-	33	33
45	-	5	5	-	25	25	-	3	3
46	-	-	-	-	8	8	-	3	3
47	-	-	-	-	12	12	-	-	-
48	-	-	-	-	8	8	-	-	-
Total ‰	485	515	1000	383	617	1000	404	596	1000
Serial Numbers	-	-	116	-	-	117	-	-	118
Number of Samples	-	-	1	-	-	1	-	-	1
Number of Fish Measured	97	103	200	92	148	240	121	178	299
Mean Length (cm)	34.0	34.3	34.1	34.5	40.9	38.5	35.1	39.0	37.4
Mean Weight (kg)	-	-	0.76	-	-	0.94	-	-	0.91
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	4 ¹	-	-	4 1/2 ¹	-	-	4 1/4 ¹
Range of Depths (fm)	-	-	100-150	-	-	100-150	-	-	100-150

¹ Mesh size - inches

TABLE 57

LENGTH FREQUENCIES - REDFISH - 4T - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)					
	Landings					
CATCHES/LANDINGS	July			September		
MONTH	Canada (Maritimes)			NK		
COUNTRY	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
SPECIES OR TYPE	51-150					
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	51-150					
20	5	-	5	-	-	-
21	5	-	5	-	-	-
22	-	5	5	3	3	6
23	-	10	10	-	11	11
24	5	10	15	3	11	14
25	40	15	55	32	43	75
26	25	30	55	96	25	121
27	20	85	105	149	107	256
28	25	70	95	36	107	143
29	10	35	45	18	96	114
30	-	20	20	-	39	39
31	10	5	15	-	9	9
32	5	15	20	3	5	8
33	5	25	30	3	-	3
34	15	25	40	20	5	25
35	45	60	105	28	12	40
36	30	25	55	28	9	37
37	35	40	75	16	7	23
38	25	45	70	9	14	23
39	10	50	60	5	12	17
40	-	40	40	2	12	14
41	-	50	50	-	16	16
42	5	10	15	-	2	2
43	-	5	5	-	3	3
44	-	5	5	-	2	2
Total ‰	320	680	1000	451	550	1001
Serial Numbers	-	-	119	-	-	120
Number of Samples	-	-	1	-	-	1
Number of Fish Measured	64	136	200	253	310	563
Mean Length (cm)	31.7	33.2	32.7	29.0	29.4	29.2
Mean Weight (kg)	-	-	0.68	-	-	0.38
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	4 3/8 ¹	-	-	4 1/8 ¹
Range of Depths (fm)	-	-	100-130	-	-	100-125

¹ Mesh size - inches

GEAR	Otter Trawl (Commercial)								
	Landings								
CATCHES/LANDINGS	June			August			September		
MONTH	United States								
COUNTRY	NK								
SPECIES OR TYPE									
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	105-440								
16	-	-	-	3	-	3	2	-	2
17	10	10	20	7	3	10	2	-	2
18	10	-	10	27	7	34	9	-	9
19	20	-	20	27	3	30	14	5	19
20	40	20	60	30	17	47	28	2	30
21	40	20	60	30	20	50	33	5	38
22	70	30	100	40	20	60	49	12	61
23	20	60	80	47	27	74	56	21	77
24	60	30	90	40	37	77	52	14	66
25	50	50	100	77	50	128	59	40	99
26	40	30	70	70	70	141	89	80	169
27	10	30	40	60	77	138	82	59	141
28	50	20	70	27	70	97	24	52	76
29	40	20	60	10	50	60	7	45	52
30	20	-	20	-	13	13	19	12	31
31	40	20	60	-	3	3	7	2	9
32	10	30	40	-	3	3	2	-	2
33	10	30	40	3	7	10	17	9	26
34	10	20	30	3	-	3	16	2	18
35	-	10	10	3	-	3	12	7	19
36	-	10	10	-	3	3	7	21	28
37	-	10	10	-	3	3	-	2	2
38	-	-	-	-	3	3	5	7	12
39	-	-	-	-	-	-	-	-	-
40	-	-	-	-	3	3	2	5	7
41	-	-	-	-	-	-	-	2	2
Total ‰	550	450	1000	507	493	1000	593	404	997
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	1	1	2	3	3	6	5	5	10
Number of Fish Measured	55	45	100	151	147	298	249	176	425
Mean Length (cm)	25.02	26.80	25.82	23.90	26.14	25.01	25.39	27.80	26.38
Mean Weight (kg)	0.26	0.33	0.29	0.23	0.29	0.26	0.27	0.35	0.31
Total Weight Landed (tons)	44	44	88	1044	1318	2362	1470	1340	2810
Estimated Number Landed	1657	1356	3013	46368	45140	91508	53636	37912	91548
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	101-150	-	-	101-150	-	-	101-150

¹ Mesh size - inches

TABLE 58
(cont'd)

LENGTH FREQUENCIES - REDFISH - 4RST - 1964

(FREQUENCIES IN %/00 - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)								
	Landings								
CATCHES/LANDINGS	October			November			December		
MONTH	United States								
COUNTRY	NK								
SPECIES OR TYPE	105-440								
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE									
16	3	-	3	-	-	-	3	-	3
17	4	-	4	2	2	5	-	-	-
18	10	-	10	2	2	5	-	-	-
19	12	-	12	20	-	20	3	-	3
20	16	1	17	15	2	18	7	-	7
21	36	-	36	42	12	55	10	-	10
22	39	11	50	22	17	40	26	7	33
23	50	24	74	35	17	53	46	17	63
24	60	33	93	42	37	80	63	50	113
25	89	63	152	60	47	108	93	89	182
26	63	69	132	72	57	130	56	96	152
27	52	76	128	85	30	115	60	79	139
28	26	52	78	37	67	105	40	83	123
29	29	26	54	22	32	55	20	40	60
30	22	11	33	25	20	45	3	10	13
31	18	10	28	20	37	58	20	10	30
32	10	14	24	12	22	35	7	-	7
33	1	19	20	5	15	20	-	3	3
34	9	16	25	-	17	18	20	3	23
35	1	9	10	7	10	18	10	-	10
36	1	8	9	-	5	5	7	3	10
37	-	4	4	-	5	5	-	-	-
38	-	-	-	2	2	5	-	3	3
39	-	-	-	-	5	5	-	7	7
40	-	1	1	-	-	-	-	7	7
41	-	1	1	-	-	-	-	-	-
Total %/00	551	449	1000	532	467	1000	493	507	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	9	9	18	4	4	8	3	3	6
Number of Fish Measured	496	404	900	213	187	400	149	153	300
Mean Length (cm)	25.10	27.51	26.18	25.64	27.79	26.65	26.11	26.97	26.55
Mean Weight (kg)	0.26	0.34	0.29	0.28	0.35	0.31	0.29	0.32	0.30
Total Weight Landed (tons)	1475	1561	3036	1002	1118	2120	442	493	935
Estimated Number Landed	56798	46263	103060	36230	31808	68038	15204	15612	30816
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	101-150	-	-	101-150	-	-	101-150

¹ Mesh size - inches

TABLE 59

LENGTH FREQUENCIES - REDFISH - 4V - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl								
	(Commercial)								
CATCHES/LANDINGS	Landings								
MONTH	January			February			March		
COUNTRY	United States								
SPECIES OR TYPE	NK								
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	73-440								
22	-	30	30	-	-	-	-	-	-
23	10	10	20	10	-	10	-	-	-
24	-	20	20	20	-	20	5	-	5
25	20	-	20	20	-	20	2	5	8
26	20	-	20	30	10	40	25	2	28
27	100	20	120	110	20	130	40	7	48
28	30	70	100	160	10	170	47	15	63
29	20	70	90	120	30	150	80	12	93
30	-	50	50	100	40	140	47	12	60
31	10	100	110	40	50	90	32	15	48
32	20	100	120	10	90	100	32	27	60
33	-	90	90	-	70	70	12	45	58
34	-	80	80	-	20	20	35	72	108
35	-	70	70	-	10	10	40	75	115
36	-	20	20	-	10	10	17	50	68
37	-	10	10	-	-	-	12	50	63
38	-	30	30	-	20	20	-	65	65
39	-	-	-	-	-	-	-	45	45
40	-	-	-	-	-	-	-	27	28
41	-	-	-	-	-	-	-	17	18
42	-	-	-	-	-	-	-	15	15
43	-	-	-	-	-	-	-	5	5
44	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	5	5
Total ‰	230	770	1000	620	380	1000	430	570	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	1	1	2	1	1	2	4	4	8
Number of Fish Measured	23	77	100	62	38	100	172	228	400
Mean Length (cm)	27.48	31.26	30.39	28.19	31.68	29.52	30.53	35.50	33.36
Mean Weight (kg)	0.33	0.49	0.45	0.35	0.49	0.40	0.45	0.70	0.59
Total Weight Landed (tons)	18	91	109	137	119	256	248	510	758
Estimated Number Landed	559	1872	2432	3923	2404	6327	5502	7294	12796
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	101-150	-	-	151-200	-	-	101-300

¹ Mesh size - inches

TABLE 59
(cont'd)

LENGTH FREQUENCIES - REDFISH - 4V - 1964

(FREQUENCIES IN %/oo - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)								
	Landings								
CATCHES/LANDINGS	April			May			June		
MONTH	United States								
COUNTRY	NK								
SPECIES OR TYPE	73-440								
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE									
17	-	-	-	-	-	-	-	2	3
18	-	3	3	-	-	-	2	2	5
19	3	-	3	-	5	5	5	-	5
20	-	-	-	5	-	5	2	-	3
21	3	-	3	20	5	25	10	-	10
22	7	7	13	15	-	15	12	7	20
23	13	3	17	20	25	45	7	15	23
24	10	3	13	25	10	35	27	15	43
25	13	3	17	70	30	100	35	15	50
26	30	3	33	55	25	80	55	32	88
27	43	3	47	75	25	100	77	35	113
28	37	27	63	65	30	90	85	32	118
29	53	13	67	40	25	65	42	22	65
30	77	43	120	45	30	70	25	65	90
31	67	33	100	20	60	80	12	42	55
32	47	53	100	15	45	60	20	25	45
33	20	40	60	5	25	30	17	35	53
34	17	47	63	-	45	45	5	45	50
35	3	83	87	-	40	40	12	30	43
36	-	67	67	5	25	30	12	35	48
37	3	37	40	-	20	20	2	17	20
38	-	30	30	-	30	30	2	17	20
39	-	33	33	5	5	10	2	5	8
40	-	10	10	-	5	5	-	12	13
41	-	7	7	-	-	-	-	10	10
42	-	3	3	-	5	5	-	2	3
43	-	-	-	-	-	-	-	2	3
Total %/oo	447	553	1000	485	515	1000	475	525	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	3	3	6	1	1	2	4	4	8
Number of Fish Measured	134	166	300	97	103	200	190	210	400
Mean Length (cm)	29.13	33.67	31.64	26.98	31.06	29.08	27.82	31.20	29.59
Mean Weight (kg)	0.39	0.60	0.51	0.32	0.49	0.40	0.35	0.49	0.43
Total Weight Landed (tons)	277	528	805	382	627	1009	618	970	1588
Estimated Number Landed	44630	35288	79919	12090	12837	24927	17685	19547	37232
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	151-300	-	-	61-200	-	-	101-200

¹ Mesh size - inches

GEAR	Otter Trawl (Commercial)								
	Landings								
CATCHES/LANDINGS	February			March			April		
MONTH	United States								
COUNTRY	NK								
SPECIES OR TYPE									
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	105-440								
16	-	-	-	-	-	-	52	-	52
17	-	-	-	10	-	10	31	-	31
18	-	-	-	-	5	5	52	-	52
19	-	-	-	15	25	40	42	-	42
20	10	10	20	40	40	80	52	31	83
21	50	10	60	40	40	80	115	21	136
22	80	40	120	50	50	100	115	63	178
23	90	50	140	105	20	125	73	63	136
24	90	60	150	95	60	155	73	73	146
25	70	120	190	30	95	125	21	42	62
26	40	60	100	35	70	105	21	31	52
27	10	30	40	5	85	90	-	10	10
28	-	110	110	-	55	55	-	-	-
29	-	40	40	-	5	5	-	10	10
30	-	20	20	-	15	15	-	10	10
31	-	-	-	-	5	5	-	-	-
32	-	10	10	-	5	5	-	-	-
Total ‰	440	560	1000	425	575	1000	646	354	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	1	1	2	2	2	4	1	1	2
Number of Fish Measured	44	56	100	85	115	200	62	34	96
Mean Length (cm)	23.41	25.73	24.71	22.79	24.60	23.83	20.98	23.65	21.93
Mean Weight (kg)	0.20	0.27	0.24	0.19	0.24	0.22	0.15	0.21	0.17
Total Weight Landed (tons)	133	226	359	199	343	542	239	183	422
Estimated Number Landed	6524	8303	14827	10485	14186	24671	15721	8621	24342
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	61-100	-	-	61-100	-	-	61-100

¹ Mesh size - inches

TABLE 60
(cont'd)

LENGTH FREQUENCIES - REDFISH - 4W - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

BEAR	Otter Trawl								
	(Commercial)						(Research)		
CATCHES/LANDINGS	Landings						Catches		
MONTH	May			June			July		
COUNTRY	United States						Poland		
SPECIES OR TYPE	NK						<i>S. mentella</i>		
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	105-440						NK		
17	-	-	-	4	2	6	-	-	-
12-18	-	-	-	-	-	-	42	21	63
18	20	10	30	8	10	18	-	-	-
19	30	-	30	20	16	36	16	9	25
20	70	20	90	27	10	37	27	13	40
21	60	60	120	61	30	91	35	27	62
22	90	60	150	57	35	92	42	35	77
23	120	40	160	58	41	99	41	37	78
24	110	40	150	96	45	142	45	46	91
25	30	20	50	68	43	111	42	59	101
26	20	50	70	26	37	63	22	79	101
27	-	30	30	36	20	56	12	107	119
28	-	50	50	10	55	65	4	105	109
29	-	50	50	10	68	78	-	53	53
30	-	20	20	3	27	30	1	34	35
31	-	-	-	2	12	14	-	12	12
32	-	-	-	2	11	13	-	12	12
33	-	-	-	-	12	12	-	7	7
34	-	-	-	-	10	10	-	6	6
35	-	-	-	-	15	15	-	6	6
36	-	-	-	-	8	8	-	2	2
37	-	-	-	-	2	2	-	1	1
Total ‰	550	450	1000	489	511	1000	329	671	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	1	1	2	5	5	10	-	-	-
Number of Fish Measured	55	45	100	244	255	499	684	1388	2072
Mean Length (cm)	22.25	24.67	23.34	23.43	26.30	24.90	22.2	26.0	24.8
Mean Weight (kg)	0.18	0.24	0.21	0.21	0.30	0.26	-	-	-
Total Weight Landed (tons)	276	313	589	277	421	698	-	-	-
Estimated Number Landed	15637	12794	28432	13273	13873	27146	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	100
Range of Depths (fm)	-	-	61-100	-	-	61-100	-	-	110-150

¹ Mesh size - inches

TABLE 61

LENGTH FREQUENCIES - REDFISH - 4X - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)								
	Landings			Landings			Landings		
CATCHES/LANDINGS	March			May			June		
MONTH	United States								
COUNTRY	NK								
SPECIES OR TYPE	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
SEX	51-310								
TONNAGE									
17	20	-	20	3	-	3	-	-	-
18	-	10	10	13	10	23	5	5	10
19	30	-	30	27	10	37	35	10	45
20	60	30	90	43	13	56	40	25	65
21	90	40	130	97	40	137	60	45	105
22	100	50	150	93	43	137	95	45	140
23	60	100	160	100	60	160	120	30	150
24	50	30	80	77	57	133	70	50	120
25	40	80	120	27	63	90	40	65	105
26	20	50	70	13	43	57	15	40	55
27	-	70	70	10	43	53	10	45	55
28	20	20	40	-	37	37	-	70	70
29	-	10	10	3	33	37	-	35	35
30	-	10	10	-	17	17	-	30	30
31	-	-	-	-	20	20	-	10	10
32	-	10	10	-	-	-	-	5	5
33	-	-	-	-	3	3	-	-	-
Total ‰	490	510	1000	507	493	1000	490	510	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	1	1	2	3	3	6	2	2	4
Number of Fish Measured	49	51	100	152	148	300	98	102	200
Mean Length (cm)	22.16	24.31	23.26	22.25	24.88	23.55	22.46	25.16	23.83
Mean Weight (kg)	0.18	0.23	0.20	0.18	0.25	0.21	0.18	0.26	0.22
Total Weight Landed (tons)	45	61	106	183	253	436	285	424	709
Estimated Number Landed	2538	2642	5180	10345	10073	20418	15716	16358	32074
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	31-60	-	-	61-100	-	-	61-100

¹ Mesh size - inches

TABLE 61 LENGTH FREQUENCIES - REDFISH - 4X - 1964
(cont'd)

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)								
	Landings								
CATCHES/LANDINGS	July			August			August		
MONTH	United States								
COUNTRY	NK								
SPECIES OR TYPE	51-310								
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	51-310								
16	-	-	-	-	-	-	20	-	20
17	-	-	-	-	-	-	10	5	15
18	-	-	-	-	-	-	20	15	35
19	3	-	3	-	-	-	55	15	70
20	3	-	3	-	-	-	40	35	75
21	3	3	6	-	-	-	60	20	80
22	23	20	43	10	-	10	95	80	175
23	10	17	27	-	-	-	105	80	185
24	30	13	43	20	-	20	95	70	165
25	53	20	73	30	10	40	10	40	50
26	83	27	110	20	30	50	10	25	35
27	53	17	70	30	-	30	-	35	35
28	87	33	120	20	10	30	5	20	25
29	53	53	107	90	60	150	-	10	10
30	47	60	107	70	40	110	-	15	15
31	7	43	50	30	30	60	-	5	5
32	3	23	27	10	40	50	-	-	-
33	-	60	60	-	140	140	-	-	-
34	-	53	53	-	90	90	-	5	5
35	-	43	43	-	120	120	-	-	-
36	-	27	27	-	70	70	-	-	-
37	-	3	3	-	30	30	-	-	-
38	-	10	10	-	-	-	-	-	-
39	-	10	10	-	-	-	-	-	-
40	-	3	3	-	-	-	-	-	-
Total ‰	460	540	1000	330	670	1000	525	475	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	2	2	4	1	1	2	1	1	2
Number of Fish Measured	138	162	300	33	67	100	105	95	200
Mean Length (cm)	26.72	30.60	28.81	28.18	32.79	31.27	21.70	23.71	22.65
Mean Weight (kg)	0.30	0.46	0.39	0.35	0.55	0.49	0.17	0.22	0.19
Total Weight Landed (tons)	331	595	926	230	730	960	114	136	250
Estimated Number Landed	10944	12848	23792	6542	13282	19823	6862	6209	13071
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	61-150	-	-	101-150	-	-	31-100

¹ Mesh size - inches

GEAR	Otter Trawl								
	(Commercial)								
CATCHES/LANDINGS	Landings								
MONTH	January			February			March		
COUNTRY	United States								
SPECIES OR TYPE	NK								
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	0-310								
16	30	10	40	3	3	6	-	-	-
17	50	20	71	18	9	27	-	-	-
18	40	90	131	12	6	18	1	3	4
19	60	100	162	45	12	57	15	8	23
20	30	80	111	63	30	93	15	14	29
21	80	100	182	60	24	84	36	16	52
22	60	90	152	74	10	84	28	27	55
23	30	20	51	59	35	94	31	16	47
24	10	30	40	67	26	93	61	24	85
25	10	20	30	71	34	105	61	21	82
26	-	10	10	42	32	74	54	12	66
27	-	-	-	22	35	57	55	41	96
28	-	10	10	27	24	51	41	30	71
29	-	10	10	26	20	46	40	48	88
30	-	-	-	14	20	34	33	48	81
31	-	-	-	5	9	14	13	39	52
32	-	-	-	1	13	14	1	42	43
33	-	-	-	-	14	14	-	27	27
34	-	-	-	3	12	15	-	38	38
35	-	-	-	-	5	5	-	28	28
36	-	-	-	-	5	5	-	18	18
37	-	-	-	-	1	1	-	15	15
38	-	-	-	-	6	6	-	-	-
39	-	-	-	-	3	3	-	-	-
Total ‰	400	590	1000	612	388	1000	485	515	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	1	1	2	4	4	8	7	7	14
Number of Fish Measured	41	59	100	243	156	399	342	358	700
Mean Length (cm)	19.92	20.69	20.38	23.24	26.06	24.33	25.52	28.86	27.22
Mean Weight (kg)	0.10	0.11	0.11	0.17	0.25	0.20	0.22	0.33	0.28
Total Weight Landed (tons)	82	138	220	209	198	407	235	371	606
Estimated Number Landed	8202	12098	20300	12617	7971	20588	10749	11149	21898
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	61-100	-	-	61-100	-	-	61-100

¹ Mesh size - inches

TABLE 62
(cont'd)

LENGTH FREQUENCIES - REDFISH - 5Y - 1964

(FREQUENCIES IN %/OO - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)								
	April			April			May		
CATCHES/LANDINGS	Landings								
MONTH	United States								
COUNTRY	United States								
SPECIES OR TYPE	NK								
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	0-310								
16	-	-	-	-	-	-	20	8	28
17	-	-	-	-	-	-	24	16	40
18	-	10	10	-	-	-	19	20	39
19	-	-	-	-	-	-	10	9	19
20	30	-	30	-	-	-	10	8	18
21	20	30	50	-	-	-	1	9	10
22	20	30	50	-	-	-	13	8	21
23	40	-	40	10	10	20	16	5	21
24	50	20	70	40	10	50	27	-	27
25	60	60	120	30	30	60	34	14	48
26	40	30	70	40	60	100	43	29	72
27	70	20	90	40	20	60	46	21	67
28	80	30	110	20	30	50	31	20	51
29	80	30	110	100	30	130	56	19	69
30	10	70	80	50	60	110	22	27	49
31	-	50	50	110	20	130	32	32	64
32	-	30	30	20	30	50	19	35	54
33	-	40	40	30	50	80	7	52	59
34	-	50	50	-	30	30	-	33	33
35	-	10	10	-	30	30	-	34	34
36	-	10	10	-	70	70	-	33	33
37	-	10	10	-	-	-	2	56	58
38	-	-	-	-	10	10	-	44	44
39	-	-	-	-	10	10	-	35	35
40	-	-	-	-	10	10	-	5	5
41	-	-	-	-	-	-	-	-	-
42	-	-	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-	2	2
Total %/oo	470	530	1000	490	510	1000	426	574	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	1	1	2	1	1	2	5	5	10
Number of Fish Measured	47	53	100	49	51	100	205	289	494
Mean Length (cm)	25.53	28.66	27.19	28.69	31.02	29.88	25.54	31.16	28.76
Mean Weight (kg)	0.22	0.45	0.27	0.31	0.41	0.36	0.23	0.44	0.35
Total Weight Landed (tons)	92	156	248	51	70	120	210	537	747
Estimated Number Landed	4281	4827	9108	1662	1730	3392	9061	12205	21266
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	101-150	-	-	61-100	-	-	61-150

¹ Mesh size - inches

TABLE 62
(cont'd)

LENGTH FREQUENCIES - REDFISH - 5Y - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)								
	Landings								
CATCHES/LANDINGS	May			June			August		
MONTH	United States								
COUNTRY	NK								
SPECIES OR TYPE	0-310								
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	0-310								
20	-	-	-	10	-	10	-	-	-
21	-	-	-	20	5	25	5	-	5
22	-	-	-	20	-	20	5	5	10
23	10	10	20	40	10	50	10	15	25
24	40	10	50	55	15	70	-	10	10
25	30	30	60	65	40	105	40	15	55
26	40	60	100	55	65	120	80	15	95
27	40	20	60	30	40	70	50	5	55
28	20	30	50	50	50	100	115	20	135
29	100	30	130	20	30	50	80	30	110
30	50	60	110	35	45	80	90	15	105
31	110	20	130	30	50	80	65	50	115
32	20	30	50	5	60	65	30	70	100
33	30	50	80	-	30	30	5	40	45
34	-	30	30	-	30	30	5	30	35
35	-	30	30	-	35	35	-	45	45
36	-	70	70	-	30	30	-	30	30
37	-	-	-	-	15	15	-	25	25
38	-	10	10	-	10	10	-	-	-
39	-	10	10	-	5	5	-	-	-
40	-	10	10	-	-	-	-	-	-
Total ‰	490	510	1000	435	565	1000	580	420	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	1	1	2	2	2	4	2	2	4
Number of Fish Measured	49	51	100	87	113	200	116	84	200
Mean Length (cm)	28.69	31.02	29.88	25.94	30.09	28.29	28.32	31.39	29.61
Mean Weight (kg)	0.31	0.41	0.36	0.23	0.37	0.31	0.29	0.42	0.34
Total Weight Landed (tons)	51	70	121	238	500	738	67	68	135
Estimated Number Landed	1662	1554	2686	10430	13547	23977	2262	1638	3900
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	61-100	-	-	61-100	-	-	61-100

¹ Mesh size - inches

TABLE 62
(cont'd)

LENGTH FREQUENCIES - REDFISH - 5Y - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)		
CATCHES/LANDINGS	Landings		
MONTH	September		
COUNTRY	United States		
SPECIES OR TYPE	NK		
SEX	♂ ²	♀	Tot.
TONNAGE	0-310		
16	124	-	124
17	103	31	134
18	31	41	72
19	134	103	237
20	103	21	124
21	52	21	72
22	-	72	72
23	21	72	93
24	10	10	20
25	-	-	-
26	10	-	10
27	-	21	21
28	-	10	10
29	-	-	-
30	-	-	-
31	-	10	10
Total ‰	588	412	1000
Serial Numbers	-	-	-
Number of Samples	1	1	2
Number of Fish Measured	57	40	97
Mean Length (cm)	18.67	21.18	19.70
Mean Weight (kg)	0.8	0.13	0.10
Total Weight Landed (tons)	41	44	85
Estimated Number Landed	5033	3532	8564
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹
Range of Depths (fm)	-	-	31-60

¹ Mesh size - inches

TABLE 63

LENGTH FREQUENCIES - REDFISH - 5Z - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)								
	Landings								
CATCHES/LANDINGS	March			May			June		
MONTH	United States								
COUNTRY	NK								
SPECIES OR TYPE									
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	11-310								
16	10	-	10	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-
18	20	10	30	3	-	3	-	5	5
19	20	-	20	-	-	-	-	-	-
20	30	30	60	10	7	17	-	-	-
21	100	20	120	27	7	34	-	5	5
22	60	60	120	27	13	40	5	-	5
23	60	70	130	30	17	47	40	25	65
24	20	40	60	43	20	63	30	30	60
25	30	40	70	53	40	93	45	35	80
26	20	50	70	60	37	97	60	40	100
27	10	60	70	83	30	113	40	15	55
28	20	50	70	37	30	67	55	35	90
29	-	20	20	57	23	80	70	35	105
30	20	-	20	30	37	67	55	10	65
31	-	20	20	20	50	70	10	45	55
32	-	10	10	7	37	43	-	50	50
33	-	30	30	-	23	23	10	10	20
34	-	-	-	-	33	33	-	35	35
35	-	-	-	-	33	33	-	30	30
36	-	-	-	-	27	27	-	50	50
37	-	30	30	-	13	13	-	45	45
38	-	10	10	-	27	27	-	60	60
39	-	-	-	-	7	7	-	15	15
40	-	10	10	-	-	-	-	-	-
41	-	-	-	-	3	3	-	5	5
Total ‰	440	560	1000	487	513	1000	420	580	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	1	1	2	3	3	6	2	2	4
Number of Fish Measured	44	56	100	146	154	300	84	116	200
Mean Length (cm)	23.30	26.45	25.06	26.06	30.13	28.15	27.08	31.39	29.58
Mean Weight (kg)	0.17	0.26	0.22	0.23	0.38	0.31	0.26	0.44	0.36
Total Weight Landed (tons)	51	102	153	119	206	325	79	183	262
Estimated Number Landed	3065	3901	6965	5149	5431	10581	3056	4221	7277
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	61-100	-	-	61-100	-	-	61-100

¹ Mesh size - inches

TABLE 63
(cont'd)

LENGTH FREQUENCIES - REDFISH - 5Z - 1964

(FREQUENCIES IN %/oo - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)					
	Landings					
CATCHES/LANDINGS	August			September		
MONTH	United States			United States		
COUNTRY	NK					
SPECIES OR TYPE	NK					
SEX	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	11-310					
17	-	-	-	10	-	10
18	-	-	-	20	-	20
19	-	-	-	10	-	10
20	-	-	-	30	20	50
21	-	-	-	40	20	60
22	30	-	30	100	30	130
23	20	-	20	110	80	190
24	51	-	51	130	60	190
25	61	40	101	80	60	140
26	71	20	91	20	70	90
27	81	61	142	10	50	60
28	61	40	101	-	40	40
29	30	10	40	-	10	10
30	10	81	91	-	-	-
31	40	41	81	-	-	-
32	10	41	51	-	-	-
33	-	51	51	-	-	-
34	-	-	-	-	-	-
35	-	20	20	-	-	-
36	-	40	40	-	-	-
37	-	20	20	-	-	-
38	-	20	20	-	-	-
39	-	40	40	-	-	-
40	-	-	-	-	-	-
41	-	10	10	-	-	-
Total %/oo	465	535	1000	560	440	1000
Serial Numbers	-	-	-	-	-	-
Number of Samples	1	1	2	1	1	2
Number of Fish Measured	46	53	99	56	44	100
Mean Length (cm)	26.54	31.57	29.23	22.86	26.64	23.64
Mean Weight (kg)	0.24	0.43	0.34	0.15	0.19	0.17
Total Weight Landed (tons)	47	95	142	46	46	92
Estimated Number Landed	1922	2214	4136	3038	2387	5425
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	61-100	-	-	61-100

¹ Mesh size - inches

TABLE 64

AGE FREQUENCIES - REDFISH - 2J - 1964

(FREQUENCIES IN ‰)

GEAR		Otter Trawl (Exploratory)					
CATCHES/LANDINGS		NK					
MONTH		July					
COUNTRY		USSR					
SPECIES OR TYPE		<i>S. mentella</i>					
TONNAGE		1800					
YEAR-CLASS	AGE	‰ Frequency			Mean Length		
		‰	‰	Tot.	‰	‰	Tot.
1957	7	-	2	2	-	-	-
1956	8	1	1	2	27.00	29.00	28.00
1955	9	6	4	10	29.17	-	29.00
1954	10	10	14	24	30.70	30.21	31.58
1953	11	43	34	77	32.29	31.97	32.15
1952	12	90	79	169	33.85	33.85	33.85
1951	13	88	59	147	34.65	35.04	34.81
1950	14	75	64	139	35.94	36.16	36.03
1949	15	92	41	133	36.95	37.22	37.04
1948	16	53	52	105	37.96	38.94	38.55
1947	17	54	22	76	39.02	39.81	39.25
1946	18	13	21	34	39.69	40.00	39.88
1945	19	22	13	35	40.95	41.07	41.00
1944	20	7	14	21	42.00	42.00	42.00
1943	21	3	5	8	41.67	43.40	42.75
1942	22	2	9	11	42.00	43.56	43.27
1941	23	1	4	5	45.00	-	-
1940	24	-	1	1	-	48.00	48.00
1939	25	-	1	1	-	49.00	49.00
Total ‰		560	440	1000			
Serial Numbers		-	-	-			
Number of Samples		4	4	4			
Number of Fish Aged		540	425	965			
Mean Age		14.25	14.46	14.34			
Mean Weight (kg)		0.68	0.72	0.70			
Total Weight Landed (tons)		-	-	1526			
Estimated Number Landed		-	-	-			
Mesh(mm) or Hook(no.) Size		-	-	110			
Range of Depths (fm)		-	-	180-300			

TABLE 65

AGE FREQUENCIES - REDFISH - JK - 1964

(FREQUENCIES IN ‰)

GEAR		Otter Trawl (Exploratory)											
CATCHES/LANDINGS		NK											
MONTH		January						April					
COUNTRY		USSR											
SPECIES OR TYPE		<i>S. mentella</i>											
TONNAGE		1800											
YEAR-CLASS	AGE	‰ Frequency			Mean Length			‰ Frequency			Mean Length		
		♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
1957	7	4	-	4	23.00	-	23.00	-	-	-	-	-	-
1956	8	20	4	24	25.00	25.00	25.00	-	-	-	-	-	-
1955	9	36	12	48	26.89	29.50	27.00	-	-	-	-	-	-
1954	10	16	16	32	26.75	-	28.00	-	-	-	-	-	-
1953	11	-	-	-	-	-	-	-	18	18	-	32.00	32.00
1952	12	12	8	20	33.67	-	33.60	9	5	14	34.50	33.00	34.00
1951	13	20	16	36	34.60	34.75	34.67	28	14	42	34.33	34.67	35.44
1950	14	47	16	63	36.00	36.00	36.00	14	23	37	35.33	36.00	35.75
1949	15	51	36	87	36.77	37.55	37.09	5	64	69	36.00	37.14	37.07
1948	16	47	44	91	37.75	38.54	38.13	5	41	46	37.00	38.67	38.50
1947	17	4	24	28	39.00	39.00	39.00	-	51	51	-	40.09	39.18
1946	18	4	40	44	40.00	41.10	41.00	-	124	124	-	41.04	41.00
1945	19	4	71	75	40.00	42.33	42.21	5	166	171	43.00	41.72	41.76
1944	20	4	59	63	42.00	43.33	43.25	-	147	147	-	42.59	42.59
1943	21	4	103	107	43.00	44.15	44.11	-	111	111	-	42.88	42.88
1942	22	-	127	127	-	45.31	45.31	-	101	101	-	43.41	43.41
1941	23	8	83	91	45.50	46.38	46.30	-	46	46	-	44.50	44.50
1940	24	-	44	44	-	47.82	47.81	-	14	14	-	46.00	46.00
1939	25	-	12	12	-	48.33	48.33	-	9	9	-	47.00	47.00
1938	26	-	4	4	-	50.00	50.00	-	-	-	-	-	-
Total ‰		281	719	1000				66	934	1000			
Serial Numbers		-	-	-				-	-	-			
Number of Samples		1	1	1				1	1	1			
Number of Fish Aged		71	181	252				14	203	217			
Mean Age		13.59	19.55	17.88				13.85	19.00	18.66			
Mean Weight (kg)		0.70	1.35	1.17				0.78	1.22	1.20			
Total Weight Landed (tons)		-	-	4.0				-	-	9.0			
Estimated Number Landed		-	-	-				-	-	-			
Mesh(mm) or Hook(no.) Size		-	-	110				-	-	110			
Range of Depths (fm)		-	-	-182-185				-	-	-190-195			

TABLE 65
(cont'd)

AGE FREQUENCIES - REDFISH - 3K - 1964

(FREQUENCIES IN %)

GEAR		Otter Trawl											
CATCHES/LANDINGS		(Exploratory)											
MONTH		May						July					
COUNTRY		USSR											
SPECIES OR TYPE		<i>S. mentella</i>											
TONNAGE		1800											
YEAR-CLASS	AGE	% Frequency			Mean Length			% Frequency			Mean Length		
		♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
1955	9	-	4	4	-	25.00	25.00	-	5	5	-	25.00	25.00
1954	10	7	11	18	30.50	28.67	29.40	-	14	14	-	30.33	30.33
1953	11	36	22	58	31.50	30.33	31.06	5	5	10	32.00	31.00	31.50
1952	12	95	25	120	32.85	31.71	33.03	33	5	38	33.43	31.00	33.12
1951	13	83	47	130	34.25	34.54	34.39	47	14	61	34.90	34.33	34.77
1950	14	95	36	131	35.58	35.90	35.67	61	37	98	35.61	36.00	35.76
1949	15	55	33	88	36.73	37.89	37.17	61	33	94	36.70	37.14	36.85
1948	16	36	47	83	37.44	38.31	37.95	50	28	78	37.45	38.33	37.76
1947	17	7	51	58	38.50	39.29	39.19	28	33	61	38.00	39.57	38.85
1946	18	7	14	21	40.00	40.00	40.00	5	47	52	39.00	40.30	40.18
1945	19	7	44	51	43.00	42.09	42.29	-	37	37	-	41.37	41.37
1944	20	7	51	58	-	44.07	44.19	9	37	46	-	42.75	42.50
1943	21	-	73	73	-	44.10	44.00	-	61	61	-	43.23	43.23
1942	22	-	55	55	-	45.86	45.86	-	110	110	-	44.75	44.75
1941	23	-	44	44	-	46.50	46.42	-	94	94	-	45.70	45.70
1940	24	-	4	4	-	48.00	48.00	5	65	70	49.00	47.36	47.47
1939	25	-	4	4	-	49.00	49.00	-	47	47	-	47.50	47.50
1938	26	-	-	-	-	-	-	-	19	19	-	49.25	49.25
1937	27	-	-	-	-	-	-	-	5	5	-	50.00	50.00
Total %		435	565	1000				304	696	1000			
Serial Numbers		-	-	-				-	-	-			
Number of Samples		1	1	1				1	1	1			
Number of Fish Aged		120	155	275				65	149	214			
Mean Age		13.65	17.64	15.90				14.66	20.15	18.53			
Mean Weight (kg)		0.74	1.17	0.99				0.68	1.09	0.96			
Total Weight Landed (tons)		-	-	2.0				-	-	55.0			
Estimated Number Landed		-	-	-				-	-	-			
Mesh(mm) or Hook(no.) Size		-	-	110				-	-	110			
Range of Depths (fm)		-	-	-145-150				-	-	-150-185			

TABLE 66

AGE/LENGTH KEYS AND FREQUENCIES (REDFISH) - 1964

(Available on request from the Secretariat)

In accordance with a recommendation made by the Research and Statistics Committee at their Annual Meeting in 1962 and reaffirmed in 1965, Age/Length Keys and Frequencies will not be published but are to be deposited in the Secretariat and made available to Member Countries on request. The following Age/Length Keys and Frequencies for redfish are now on file in the Secretariat.

GEAR: Otter Trawl

U. S. S. R.

Division	Month
2J	July
3K	January
3K	April
3K	May
3K	July

GEAR	Otter Trawl			
	(Commercial)			
CATCHES/LANDINGS	Catches			
MONTH	March	June	July	August
COUNTRY	USSR			
TONNAGE	NK			
12-13	-	-	1	-
14-15	-	-	6	-
16-17	-	-	4	-
18-19	2	-	2	-
20-21	9	-	3	-
22-23	69	1	20	2
24-25	142	3	99	3
26-27	286	45	156	37
28-29	282	212	278	89
30-31	136	293	258	295
32-33	22	188	103	273
34-35	22	123	39	149
36-37	6	59	16	59
38-39	6	48	6	49
40-41	5	18	4	17
42-43	5	4	2	19
44-45	3	3	1	5
46-47	2	2	1	2
48-49	3	1	1	1
Total ‰	1000	1000	1000	1000
Serial Numbers	-	-	-	-
Number of Samples	6	4	34	11
Number of Fish Measured	625	1900	14745	3345
Mean Length (cm)	27.8	31.8	29.0	33.4
Mean Weight (kg)	-	0.238	0.191	-
Total Weight Landed (tons)	1097.8	629	12417.7	18332.7
Estimated Number Landed	-	-	-	-
Mesh(mm) or Hook(no.) Size	40	40	40	40
Range of Depths (fm)	90-150	90-140	60-75	10-75

TABLE 68

LENGTH FREQUENCIES - SILVER HAKE - 5Y - 1964

(FREQUENCIES IN %/OO - 2 CM GROUPS)

GEAR	Otter Trawl (Commercial)											
	Landings											
CATCHES/LANDINGS	May			June			August			September		
MONTH												
COUNTRY				United States								
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	0-215											
18-19	-	-	-	-	-	-	1	-	1	3	1	4
20-21	-	-	-	5	-	5	7	-	7	5	-	5
22-23	30	15	45	24	10	34	24	10	34	4	1	5
24-25	20	15	35	19	19	38	57	5	62	33	1	34
26-27	15	5	20	10	14	24	136	12	148	98	16	113
28-29	10	5	15	38	33	72	99	26	125	147	26	173
30-31	164	40	204	144	62	206	114	67	181	145	66	211
32-33	95	134	229	124	163	287	55	145	200	71	144	215
34-35	40	129	169	19	105	124	10	75	85	20	102	122
36-37	-	90	90	-	77	77	10	66	76	2	43	45
38-39	-	45	45	-	33	33	-	37	37	-	17	17
40-41	-	20	20	-	33	33	-	2	2	1	11	12
42-43	5	5	10	-	19	19	-	4	4	-	7	7
44-45	-	25	25	-	-	-	-	11	11	-	6	6
46-47	-	20	20	-	5	5	-	4	4	-	4	4
48-49	-	20	20	-	14	14	-	6	6	-	6	6
50-51	-	15	15	-	5	5	-	9	9	-	8	8
52-53	-	5	5	-	14	14	-	-	-	-	3	3
54-55	-	20	20	-	-	-	-	1	1	-	4	4
56-57	-	5	5	-	5	5	-	6	6	-	4	4
58-59	-	10	10	-	5	5	-	2	2	-	2	2
Total %/oo	378	622	1000	383	617	1000	512	488	1000	529	471	1000
Serial Numbers	-	-	-	-	-	-	-	-	-	-	-	-
Number of Samples	2	2	2	2	2	4	5	5	10	11	11	22
Number of Fish Measured	76	128	204	80	130	210	321	290	611	616	546	1162
Mean Length (cm)	30.42	36.96	34.49	30.12	34.92	33.08	28.26	34.36	31.23	29.06	34.50	31.62
Mean Weight (kg)	0.20	0.38	0.31	0.20	0.36	0.30	0.15	0.28	0.21	0.16	0.30	0.23
Total Weight Landed (tons)	84	257	341	943	2693	3636	3028	5426	8454	1514	2450	3964
Estimated Number Landed	4110	6760	10871	46453	74905	121357	203169	193709	396878	92274	82063	174336
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	90-110	-	-	90-110	-	-	18-50	-	-	40-50

¹ Mesh size - inches

TABLE 68
(cont'd)

LENGTH FREQUENCIES - SILVER HAKE - 5Y - 1964

(FREQUENCIES IN ‰ - 2 CM GROUPS)

GEAR	Otter Trawl (Commercial)					
	Landings					
CATCHES/LANDINGS	October			November		
MONTH	United States			United States		
COUNTRY	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
SEX	0-215					
TONNAGE						
8-9	1	-	1	-	-	-
10-11	1	-	1	-	-	-
12-13	4	-	4	-	-	-
14-15	4	-	4	-	-	-
16-17	2	1	3	-	-	-
18-19	4	-	4	4	-	4
20-21	2	-	2	12	-	12
22-23	3	-	3	18	2	20
24-25	8	6	15	12	8	20
26-27	57	25	82	44	8	52
28-29	136	61	197	161	24	185
30-31	139	91	230	155	56	210
32-33	76	129	204	60	133	192
34-35	18	92	110	18	85	103
36-37	2	52	54	-	83	83
38-39	1	19	20	2	32	34
40-41	2	7	9	-	20	20
42-43	-	15	15	-	8	8
44-45	-	6	6	-	6	6
46-47	-	5	5	-	10	10
48-49	-	5	5	-	10	10
50-51	-	7	7	-	6	6
52-53	-	3	3	-	6	6
54-55	-	6	6	-	10	10
56-57	-	5	5	-	2	2
58-59	-	3	3	-	8	8
Total ‰	461	539	1000	484	516	1000
Serial Numbers	-	-	-	-	-	-
Number of Samples	9	9	18	5	5	10
Number of Fish Measured	444	525	969	244	265	509
Mean Length (cm)	29.21	34.04	31.81	29.11	35.72	32.52
Mean Weight (kg)	0.17	0.29	0.23	0.16	0.24	0.20
Total Weight Landed (tons)	770	1529	2299	459	733	1192
Estimated Number Landed	45854	53703	99557	28064	29904	57968
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	34-50	-	-	40-50

¹ Mesh size - inches

TABLE 69

LENGTH FREQUENCIES - SILVER HAKE - 5Z - 1964

(FREQUENCIES IN ‰ - 2 CM GROUPS)

GEAR	Otter Trawl							
	(Commercial)							
CATCHES/LANDINGS	Catches							
MONTH	January	February	March	April	May	June	July	August
COUNTRY	USSR							
TONNAGE	NK							
	18-19	-	-	1	-	-	-	-
20-21	12	3	4	4	-	-	-	-
22-23	128	14	14	26	30	11	3	1
24-25	225	86	146	178	34	96	51	4
26-27	182	148	240	252	52	203	142	66
28-29	91	114	203	181	109	178	210	152
30-31	121	203	152	121	184	200	296	249
32-33	151	204	144	95	169	162	28	189
34-35	58	132	56	53	88	92	103	66
36-37	23	62	19	24	83	36	43	42
38-39	3	18	7	16	39	11	47	67
40-41	3	3	4	6	52	3	34	43
42-43	3	5	2	13	43	2	22	38
44-45	-	5	2	7	39	4	15	34
46-47	-	2	1	6	32	2	5	28
48-49	-	1	1	6	26	-	1	16
50-51	-	-	1	5	8	-	-	4
52-53	-	-	1	4	10	-	-	1
54-55	-	-	1	3	1	-	-	-
56-57	-	-	1	-	1	-	-	-
Total ‰	1000	1000	1000	1000	1000	1000	1000	1000
Serial Numbers	-	-	-	-	-	-	-	-
Number of Samples	1	5	8	21	14	48	18	11
Number of Fish Measured	329	2094	3210	3624	3370	16230	5495	3345
Mean Length (cm)	27.9	30.8	27.7	29.3	34.1	29.9	31.2	33.4
Mean Weight (kg)	0.222	-	0.120	0.162	0.195	0.204	0.221	0.209
Total Weight Landed (tons)	8516	7657.1	3767.4	28473.6	13984	41208.3	20534.2	7706
Estimated Number Landed	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	40	40	40	40	40	40	40	40
Range of Depths (fm)	90-140	75-150	80-130	80-130	40-150	30-145	25-95	30-60

TABLE 69
(cont'd)

LENGTH FREQUENCIES - SILVER HAKE - 5Z - 1964

(FREQUENCIES IN ‰ - 2 CM GROUPS)

GEAR	Otter Trawl (Commercial)								
	Landings								
CATCHES/LANDINGS	April			June			July		
MONTH	United States								
COUNTRY									
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	0-215								
22-23	-	19	19	-	-	-	-	-	-
24-25	49	39	87	25	5	30	10	-	10
26-27	107	68	175	66	16	82	99	10	109
28-29	194	29	223	140	17	157	139	-	139
30-31	146	29	175	238	46	284	257	40	297
32-33	78	58	136	118	99	216	99	109	208
34-35	-	68	68	20	90	109	20	79	99
36-37	-	29	29	4	47	51	-	40	40
38-39	-	-	-	-	15	15	-	20	20
40-41	10	-	10	-	13	13	-	10	10
42-43	10	19	29	-	7	7	-	10	10
44-45	-	10	10	-	10	10	-	10	10
46-47	-	-	-	-	4	4	-	10	10
48-49	-	-	-	-	4	4	-	20	20
50-51	-	19	19	-	4	4	-	-	-
52-53	-	-	-	-	2	2	-	10	10
54-55	-	10	10	-	4	4	-	-	-
56-57	-	-	-	-	7	7	-	10	10
58-59	-	10	10	-	-	-	-	-	-
Total ‰	592	408	1000	611	389	1000	624	376	1000
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	1	1	2	7	7	14	1	1	2
Number of Fish Measured	61	42	103	454	293	747	63	39	102
Mean Length (cm)	29.25	33.21	30.87	29.91	34.89	31.85	29.77	36.45	32.28
Mean Weight (kg)	0.18	0.32	0.24	0.18	0.31	0.23	0.19	0.37	0.25
Total Weight Landed (tons)	41	50	91	1160	1245	2405	1646	1968	3614
Estimated Number Landed	2277	1568	3845	63259	40297	103556	88547	53409	141956
Mesh(mm) or Hook(no.) Size	-	-	2.5 ¹	-	-	2.5 ¹	-	-	2.5 ¹
Range of Depths (fm)	-	-	98-130	-	-	13-110	-	-	28-50

¹ Mesh size - inches

TABLE 70

AGE FREQUENCIES - SILVER HAKE - 4W - 1964

(FREQUENCIES IN ‰)

GEAR		Otter Trawl (Commercial)											
CATCHES/LANDINGS		Catches											
MONTH		June						July					
COUNTRY		USSR											
TONNAGE		NK											
YEAR-CLASS	AGE	‰ Frequency			Mean Length			‰ Frequency			Mean Length		
		♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
1963	1	-	-	-	-	-	-	-	-	6	-	-	14.5
1962	2	-	-	-	-	-	-	30	6	90	24.0	24.5	23.3
1961	3	156	74	230	28.4	28.6	28.5	314	116	498	27.9	29.0	28.6
1960	4	260	369	629	30.3	31.8	31.1	106	266	372	30.5	32.0	31.5
1959	5	14	106	120	34.0	37.0	36.7	-	16	16	-	36.7	36.7
1958	6	-	21	21	-	41.1	41.1	3	6	9	42.5	45.5	44.5
1957	7	-	-	-	-	-	-	-	3	3	-	52.5	52.5
1956	8	-	-	-	-	-	-	-	-	-	-	-	-
1955	9	-	-	-	-	-	-	-	6	6	-	61.5	61.5
Total ‰		430	570	1000				453	419	1000 ¹			
Serial Numbers		-	-	-				-	-	-			
Number of Samples		-	-	3				-	-	9			
Number of Fish Aged		121	161	282				166	154	320			
Mean Age		3.7	3.9	3.9				3.2	3.9	3.5			
Mean Weight (kg)		-	-	0.238				-	-	0.191			
Total Weight Landed (tons)		-	-	629				-	-	12417.7			
Estimated Number Landed		-	-	-				-	-	-			
Mesh(mm) or Hook(no.) Size		-	-	40				-	-	40			
Range of Depths (fm)		-	-	90-140				-	-	60-75			

¹ Total includes 47 juveniles = 128 ‰

TABLE 70
(cont'd)

AGE FREQUENCIES - SILVER HAKE - 4W - 1964

(FREQUENCIES IN ‰)

GEAR		Otter Trawl (Commercial)					
CATCHES/LANDINGS		Catches					
MONTH		August					
COUNTRY		USSR					
TONNAGE		NK					
YEAR-CLASS	AGE	‰ Frequency			Mean Length		
		♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
1962	2	37	32	69	24.2	23.9	24.0
1961	3	317	382	699	27.5	28.5	28.1
1960	4	32	175	207	31.3	32.1	31.9
1959	5	-	10	10	-	37.5	37.5
1958	6	-	10	10	-	43.5	43.5
1957	7	-	5	5	-	54.5	54.5
Total ‰		386	614	1000			
Serial Numbers		-	-	-			
Number of Samples		-	-	2			
Number of Fish Aged		73	116	189			
Mean Age		2.9	3.3	3.2			
Mean Weight (kg)		-	-	-			
Total Weight Landed (tons)		-	-	18332.7			
Estimated Number Landed		-	-	-			
Mesh(mm) or Hook(no.) Size		-	-	40			
Range of Depths (fm)		-	-	20-80			

TABLE 71

AGE FREQUENCIES - SILVER HAKE - 52 - 1964

(FREQUENCIES IN %/oo)

GEAR		Otter Trawl (Commercial)											
CATCHES/LANDINGS		Catches											
MONTH		March						April					
COUNTRY		USSR											
TONNAGE		NK											
YEAR-CLASS	AGE	%/oo Frequency			Mean Length			%/oo Frequency			Mean Length		
		♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
1962	2	91	45	147	24.3	24.5	24.3	-	-	4	-	-	21.5
1961	3	337	169	510	26.6	27.4	26.9	223	77	316	27.9	28.3	27.8
1960	4	124	124	248	29.9	31.3	30.6	288	235	523	31.4	32.5	31.9
1959	5	11	61	72	34.5	35.6	35.3	17	115	132	35.1	37.4	36.9
1958	6	-	15	15	-	43.5	43.5	-	21	21	-	42.9	42.9
1957	7	-	8	8	-	48.5	48.5	2	2	4	44.2	52.5	48.5
Total %/oo		563	422	1000 ¹				530	450	1000 ²			
Serial Numbers		-	-	-				-	-	-			
Number of Samples		-	-	3				-	-	6			
Number of Fish Aged		148	111	263				275	233	521			
Mean Age		3.1	3.6	3.3				3.6	4.2	3.9			
Mean Weight (kg)		-	-	0.137				-	-	0.162			
Total Weight Landed (tons)		-	-	3767.4				-	-	28473.6			
Estimated Number Landed		-	-	-				-	-	-			
Mesh(mm) or Hook(no.) Size		-	-	40				-	-	40			
Range of Depths (fm)		-	-	80-130				-	-	80-130			

¹ Total includes 4 juveniles = 15 %/oo

² Total includes 13 juveniles = 20 %/oo

TABLE 71
(cont'd)

AGE FREQUENCIES - SILVER HAKE - 5Z - 1964

(FREQUENCIES IN ‰)

GEAR		Otter Trawl											
CATCHES/LANDINGS		(Commercial)											
MONTH		May						June					
COUNTRY		USSR											
TONNAGE		NK											
YEAR-CLASS	AGE	‰ Frequency			Mean Length			‰ Frequency			Mean Length		
		♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
1962	2	33	12	52	24.1	24.5	24.1	26	17	45	24.6	24.6	24.6
1961	3	229	97	333	27.7	28.0	27.8	275	174	454	28.0	28.5	28.2
1960	4	310	175	485	30.8	32.1	31.3	205	201	406	30.9	32.1	31.9
1959	5	11	117	128	35.3	36.0	36.0	10	70	80	35.9	36.3	36.2
1958	6	-	2	2	-	40.5	40.5	-	7	7	-	42.3	42.3
1957	7	-	-	-	-	-	-	-	8	8	-	46.7	46.7
Total ‰		583	403	1000 ¹				516	477	1000 ²			
Serial Numbers		-	-	-				-	-	-			
Number of Samples		-	-	5				-	-	12			
Number of Fish Aged		244	170	420				576	533	1116			
Mean Age		3.5	4.0	3.7				3.4	3.8	3.6			
Mean Weight (kg)		-	-	0.180				-	-	0.204			
Total Weight Landed (tons)		-	-	13984				-	-	41208.3			
Estimated Number Landed		-	-	-				-	-	-			
Mesh(mm) or Hook(no.) Size		-	-	40				-	-	40			
Range of Depths (fm)		-	-	40-150				-	-	30-145			

¹ Total includes 6 juveniles = 14 ‰² Total includes 7 juveniles = 7 ‰

TABLE 71
(cont'd)

AGE FREQUENCIES - SILVER HAKE - 5Z - 1964

(FREQUENCIES IN ‰)

GEAR		Otter Trawl (Commercial)											
CATCHES/LANDINGS		Catches											
MONTH		July						August					
COUNTRY		USSR											
TONNAGE		NK											
YEAR-CLASS	AGE	‰ Frequency			Mean Length			‰ Frequency			Mean Length		
		‰	‰	Tot.	‰	‰	Tot.	‰	‰	Tot.	‰	‰	Tot.
1962	2	23	2	27	24.5	24.5	24.5	8	4	16	24.5	24.5	24.5
1961	3	257	260	550	28.0	28.9	28.4	305	136	441	28.8	28.5	28.6
1960	4	80	266	346	31.2	32.7	32.4	166	250	416	31.3	33.2	32.5
1959	5	-	71	71	-	36.3	36.3	4	115	119	36.5	37.5	37.5
1958	6	-	6	6	-	43.1	43.1	-	8	8	-	45.5	45.5
Total ‰		360	605	1000 ¹				483	513	1000 ²			
Serial Numbers		-	-	-				-	-	-			
Number of Samples		-	-	5				-	-	3			
Number of Fish Aged		173	290	480				113	121	235			
Mean Age		3.2	3.7	3.5				3.3	4.0	3.7			
Mean Weight (kg)		-	-	0.221				-	-	0.209			
Total Weight Landed (tons)		-	-	20534.2				-	-	7706			
Estimated Number Landed		-	-	-				-	-	-			
Mesh(mm) or Hook(no.) Size		-	-	40				-	-	40			
Range of Depths (fm)		-	-	25-95				-	-	30-60			

¹ Total includes 17 juveniles = 35 ‰² Total includes 1 juvenile = 4 ‰

TABLE 71
(cont'd)

AGE FREQUENCIES - SILVER HAKE - 52 - 1964

(FREQUENCIES IN ‰)

GEAR		Otter Trawl (Commercial)					
CATCHES/LANDINGS		Catches					
MONTH		September					
COUNTRY		USSR					
TONNAGE		NK					
YEAR-CLASS	AGE	‰ Frequency			Mean Length		
		♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
1963	1	-	10	10	-	18.5	18.5
1962	2	188	167	355	25.9	26.0	25.9
1961	3	240	333	573	28.0	28.9	28.5
1960	4	10	32	42	32.5	33.9	33.5
1959	5	-	21	21	-	37.5	37.5
Total ‰		437	563	1000			
Serial Numbers		-	-	-			
Number of Samples		-	-	1			
Number of Fish Aged		42	54	96			
Mean Age		2.6	2.8	2.7			
Mean Weight (kg)		-	-	-			
Total Weight Landed (tons)		-	-	13353.3			
Estimated Number Landed		-	-	-			
Mesh(mm) or Hook(no.) Size		-	-	40			
Range of Depths (fm)		-	-	-			

TABLE 72

AGE/LENGTH KEYS AND FREQUENCIES (SILVER HAKE) - 1964

(Available on request from the Secretariat)

In accordance with a recommendation made by the Research and Statistics Committee at their Annual Meeting in 1962 and reaffirmed in 1965, Age/Length Keys and Frequencies will not be published but are to be deposited in the Secretariat and made available to Member Countries on request. The following Age/Length Keys and Frequencies for silver hake are now on file in the Secretariat.

GEAR: Otter Trawl

U. S. S. R.

Division	Month
4W	June July August
5Z	March April May June July August September

TABLE 73

LENGTH FREQUENCIES - AMERICAN PLAICE - 2J - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl					
	(Exploratory)			(Research)		
CATCHES/LANDINGS	Catches					
MONTH	July			June		
COUNTRY	Iceland			Poland		
SEX	♂♂	♀♀	Tot. ¹	♂♂	♀♀	Tot.
TONNAGE		491			NK	
14	-	-	-	-	-	7
15	-	-	-	-	-	-
16	-	-	-	-	-	-
17	-	-	-	-	-	7
18	-	-	-	-	-	7
19	-	-	-	-	-	14
20	-	-	5	-	-	54
21	-	-	10	-	-	32
22	-	-	-	-	-	27
23	-	-	-	-	-	53
24	-	-	-	-	-	32
25	-	-	15	-	-	53
26	-	-	5	-	-	20
27	-	-	5	-	-	14
28	-	-	10	-	-	20
29	10	10	44	-	-	43
30	-	10	5	-	-	26
31	31	-	49	-	-	67
32	10	20	44	-	-	32
33	10	20	39	-	-	74
34	20	20	44	-	-	61
35	-	51	69	-	-	61
36	-	51	89	-	-	54
37	20	41	54	-	-	43
38	20	51	49	-	-	20
39	-	102	74	-	-	47
40	20	51	64	-	-	47
41	-	51	39	-	-	-
42	10	20	39	-	-	43
43	-	51	49	-	-	7
44	10	72	64	-	-	14
45	-	72	39	-	-	14
46	-	-	15	-	-	-
47	-	72	44	-	-	7
48	-	20	10	-	-	-
49	-	-	5	-	-	-
50	-	-	-	-	-	-
51	-	10	5	-	-	-
52	-	-	-	-	-	-
53	-	-	-	-	-	-
54	-	-	-	-	-	-
55	-	10	5	-	-	-
56	-	10	5	-	-	-
57	-	10	5	-	-	-
Total ‰	161	835	998 ¹	-	-	1000
Serial Numbers	-	-	-	-	-	-
Number of Samples	1	1	1	-	-	-
Number of Fish Measured	16	82	203 ¹	-	-	148
Mean Length (cm)	35.69	40.68	37.86	-	-	30.5
Mean Weight (kg)	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	-	-	-	100
Range of Depths (fm)	-	-	114-122	-	-	-

¹ Additional sample - not sexed - was used in compiling the total length frequency.

TABLE 74

LENGTH FREQUENCIES - AMERICAN PLAICE - JK - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl		
CATCHES/LANDINGS	(Research)		
MONTH	Catches		
COUNTRY	June		
SEX	♂	♀	Tot.
TONNAGE	Poland		
		NK	
14	-	-	4
15	-	-	11
16	-	-	19
17	-	-	28
18	-	-	28
19	-	-	38
20	-	-	40
21	-	-	38
22	-	-	55
23	-	-	62
24	-	-	89
25	-	-	68
26	-	-	70
27	-	-	72
28	-	-	59
29	-	-	35
30	-	-	36
31	-	-	53
32	-	-	30
33	-	-	15
34	-	-	19
35	-	-	17
36	-	-	13
37	-	-	11
38	-	-	8
39	-	-	4
40	-	-	8
41	-	-	8
42	-	-	6
43	-	-	8
44	-	-	8
45	-	-	11
46	-	-	2
47-56	-	-	27
Total ‰	-	-	1000
Serial Numbers	-	-	-
Number of Samples	-	-	-
Number of Fish Measured	-	-	472
Mean Length (cm)	-	-	27.0
Mean Weight (kg)	-	-	-
Total Weight Landed (tons)	-	-	-
Estimated Number Landed	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	100
Range of Depths (fm)	-	-	-

TABLE 75

LENGTH FREQUENCIES - AMERICAN PLAICE - 3L - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)											
	Landings after discard											
CATCHES/LANDINGS	January			April			May			June		
MONTH	Canada (Newfoundland)											
COUNTRY												
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	151-500											
21	-	-	-	-	-	-	1	-	1	-	-	-
22	-	-	-	-	-	-	-	1	1	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	1	-	1	-	-	-
25	-	-	-	-	-	-	1	1	2	-	-	-
26	-	-	-	1	-	1	-	-	-	-	-	-
27	-	-	-	-	-	-	5	2	7	-	-	-
28	-	-	-	-	-	-	3	4	7	-	-	-
29	-	-	-	1	2	3	2	3	5	-	-	-
30	-	-	-	3	2	5	2	4	6	-	-	-
31	-	-	-	7	2	9	5	6	11	-	3	3
32	-	-	-	11	2	13	4	3	7	3	1	4
33	-	-	-	10	9	19	12	5	17	5	3	8
34	3	3	6	22	8	30	15	8	23	16	8	24
35	7	-	7	25	6	31	20	7	27	21	15	36
36	13	3	16	32	6	38	19	11	30	24	16	40
37	10	-	10	36	7	43	31	6	37	39	8	47
38	20	3	23	42	7	49	45	13	58	45	13	58
39	13	7	20	42	13	55	49	15	64	38	20	58
40	16	7	23	55	15	70	44	24	68	24	10	34
41	7	7	14	49	23	72	45	21	66	36	15	51
42	39	13	52	35	18	53	55	25	80	54	26	80
43	39	13	52	42	11	53	39	25	64	48	28	76
44	23	23	46	47	22	69	26	24	50	43	29	72
45	30	30	60	41	15	56	22	30	52	26	31	57
46	36	30	66	23	32	55	12	24	36	18	30	48
47	36	30	66	15	24	39	8	32	40	9	44	53
48	13	56	69	22	18	40	4	24	28	4	28	32
49	3	40	43	4	21	25	6	35	41	3	20	23
50	3	66	69	3	22	25	-	20	20	2	31	33
51	3	46	49	1	18	19	1	25	26	-	36	36
52	-	46	46	-	17	17	1	20	21	-	18	18
53	-	59	59	-	14	14	-	22	22	-	17	17
54	-	40	40	-	6	6	1	12	13	-	15	15
55	-	23	23	-	19	19	-	9	9	-	16	16
56	-	33	33	1	15	16	-	9	9	-	12	12
57	-	39	39	-	14	14	-	5	5	-	15	15
58	-	10	10	-	14	14	-	6	6	-	14	14
59	-	16	16	-	5	5	-	9	9	-	6	6
60	-	20	20	-	8	8	-	5	5	-	3	3
61	-	7	7	-	3	3	-	5	5	-	6	6
62	-	13	13	-	4	4	-	6	6	-	4	4
63	-	-	-	-	1	1	-	4	4	-	3	3
64	-	3	3	-	2	2	-	4	4	-	-	-
65	-	-	-	-	1	1	-	3	3	-	-	-
66	-	-	-	-	-	-	-	3	3	-	-	-
67	-	-	-	-	2	2	-	1	1	-	-	-
68	-	-	-	-	2	2	-	2	2	-	1	1
Total ‰	314	686	1000	570	430	1000	479	523	1002	458	545	1003
Serial Numbers	-	-	-	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	1	-	-	5	-	-	6	-	-	3
Number of Fish Measured	-	-	304	-	-	1110	-	-	1423	-	-	669
Mean Length (cm)	-	-	48.37	-	-	43.43	-	-	43.24	-	-	44.01
Mean Weight (kg)	-	-	1.40	-	-	0.88	-	-	0.83	-	-	0.88
Total Weight Landed (tons)	-	-	44	-	-	1820	-	-	2213	-	-	4338
Estimated Number Landed	-	-	31107	-	-	2082680	-	-	2668728	-	-	4918851
Mesh(mm) or Hook(no.) Size	-	-	4 1/2 ¹	-	-	4 1/2 ²	-	-	large ³	-	-	large ⁴
Range of Depths (fm)	-	-	96-100	-	-	43-90	-	-	38-84	-	-	40-105

1 inches - drylene

2 inches - manilla

3 large - manilla and nylon

4 large - manilla and courlene

TABLE 75
(cont'd)

LENGTH FREQUENCIES - AMERICAN PLAICE - 3L - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl								
	(Commercial)								
CATCHES/LANDINGS	Landings after discard								
MONTH	September			October			November		
COUNTRY	Canada (Newfoundland)								
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	151-500								
30	-	-	-	-	-	-	2	-	2
31	-	-	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-	-	-
33	-	-	-	-	-	-	2	-	2
34	-	-	-	-	-	-	4	-	4
35	-	-	-	13	-	13	2	-	2
36	4	-	4	21	-	21	4	-	4
37	-	-	-	21	-	21	11	7	18
38	16	-	16	26	17	43	27	7	34
39	16	4	20	34	9	43	16	7	23
40	16	-	16	9	17	26	36	14	50
41	8	12	20	56	30	86	32	20	52
42	28	16	44	60	56	116	32	32	64
43	32	8	40	38	51	89	41	23	64
44	36	20	56	26	68	94	29	34	63
45	24	8	32	30	34	64	18	41	59
46	28	20	48	21	51	72	16	45	61
47	16	24	40	4	51	55	4	59	63
48	16	44	60	-	43	43	2	45	47
49	16	12	28	4	34	38	7	52	59
50	-	52	52	4	17	21	2	56	58
51	4	44	48	-	21	21	2	41	43
52	8	68	76	-	21	21	-	52	52
53	-	44	44	-	30	30	-	45	45
54	-	60	60	-	17	17	-	36	36
55	-	44	44	-	17	17	-	11	11
56	-	20	20	-	13	13	-	16	16
57	-	32	32	-	9	9	-	20	20
58	-	56	56	-	4	4	-	18	18
59	-	44	44	-	9	9	-	9	9
60	-	32	32	-	4	4	-	9	9
61	-	20	20	-	4	4	-	7	7
62	-	8	8	-	-	-	-	4	4
63	-	12	12	-	-	-	-	2	2
64	-	8	8	-	4	4	-	-	-
65	-	8	8	-	-	-	-	-	-
66	-	-	-	-	-	-	-	-	-
67	-	-	-	-	-	-	-	-	-
68	-	8	8	-	-	-	-	-	-
69	-	4	4	-	-	-	-	-	-
Total ‰	268	732	1000	367	631	998	289	712	1001
Serial Numbers	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	1	-	-	1	-	-	2
Number of Fish Measured	-	-	250	-	-	234	-	-	444
Mean Length (cm)	-	-	50.83	-	-	44.89	-	-	46.88
Mean Weight (kg)	-	-	1.57	-	-	0.98	-	-	1.22
Total Weight Landed (tons)	-	-	699	-	-	477	-	-	366
Estimated Number Landed	-	-	448077	-	-	485296	-	-	300933
Mesh(mm) or Hook(no.) Size	-	-	large ¹	-	-	4 1/2 ²	-	-	large ³
Range of Depths (fm)	-	-	80	-	-	43	-	-	15-96

1 large - manilla

2 inches - nylon

3 large - nylon and courlene

TABLE 75 LENGTH FREQUENCIES - AMERICAN PLAICE - 3L - 1964
(cont'd)

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Research)					
	Catches					
CATCHES/LANDINGS	June			July		
MONTH	Poland					
COUNTRY	♂♂		Tot.	♀♀		Tot.
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	NK					
16-17	-	-	7	-	-	7
18	-	-	18	-	-	4
19	-	-	34	-	-	10
20	-	-	22	-	-	19
21	-	-	20	-	-	34
22	-	-	43	-	-	31
23	-	-	97	-	-	34
24	-	-	115	-	-	25
25	-	-	164	-	-	50
26	-	-	96	-	-	32
27	-	-	72	-	-	38
28	-	-	31	-	-	39
29	-	-	25	-	-	45
30	-	-	41	-	-	57
31	-	-	39	-	-	32
32	-	-	34	-	-	32
33	-	-	36	-	-	37
34	-	-	14	-	-	13
35	-	-	16	-	-	16
36	-	-	14	-	-	26
37	-	-	11	-	-	44
38	-	-	16	-	-	34
39	-	-	5	-	-	38
40	-	-	7	-	-	32
41	-	-	2	-	-	42
42	-	-	7	-	-	42
43	-	-	2	-	-	37
44	-	-	2	-	-	18
45	-	-	-	-	-	22
46	-	-	-	-	-	16
47	-	-	2	-	-	22
48	-	-	-	-	-	12
49	-	-	-	-	-	9
50	-	-	2	-	-	9
51	-	-	2	-	-	12
52	-	-	-	-	-	6
53	-	-	-	-	-	6
54	-	-	-	-	-	6
55	-	-	2	-	-	1
56	-	-	2	-	-	1
57-66	-	-	-	-	-	10
Total ‰	-	-	1000	-	-	1000
Serial Numbers	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-
Number of Fish Measured	-	-	555	-	-	685
Mean Length (cm)	-	-	26.8	-	-	26.9
Mean Weight (kg)	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	100	-	-	100
Range of Depths (fm)	-	-	-	-	-	-

TABLE 76

LENGTH FREQUENCIES - AMERICAN PLAICE - 3N - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)											
	Landings after discard											
CATCHES/LANDINGS	January			February			March			June		
MONTH	Canada (Newfoundland)											
COUNTRY												
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	151-500											
27	-	-	-	-	1	1	-	-	-	-	-	-
28	-	-	-	-	1	1	9	-	9	-	-	-
29	-	-	-	-	-	-	9	5	14	-	-	-
30	-	-	-	-	1	1	18	14	32	2	2	4
31	5	-	5	2	2	4	51	14	65	7	5	12
32	9	-	9	8	3	11	18	28	46	9	9	18
33	14	-	14	3	2	5	55	51	106	16	5	21
34	5	10	15	13	7	20	37	46	83	12	23	35
35	14	10	24	17	9	26	28	41	69	7	28	35
36	29	10	39	22	18	40	37	51	88	21	16	37
37	19	29	48	28	24	52	51	46	97	23	30	53
38	24	14	38	37	25	62	74	74	148	39	39	78
39	19	57	76	29	32	61	28	51	79	25	32	57
40	14	14	28	42	27	69	28	23	51	30	39	69
41	43	38	81	40	37	77	9	32	41	28	28	56
42	62	14	76	39	35	74	-	-	-	16	35	51
43	33	29	62	40	32	72	9	9	18	28	16	44
44	43	29	72	39	20	59	9	9	18	46	30	76
45	33	9	42	33	18	51	-	-	-	19	23	42
46	33	19	52	30	30	60	9	-	9	16	14	30
47	33	14	47	18	22	40	4	-	4	12	21	33
48	33	19	52	16	25	41	-	-	-	5	21	26
49	9	29	38	5	30	35	-	4	4	7	16	23
50	5	29	34	3	26	29	-	4	4	2	19	21
51	5	19	24	3	26	29	-	-	-	2	28	30
52	-	43	43	1	13	14	-	5	5	-	25	25
53	-	19	19	-	18	18	-	-	-	-	30	30
54	-	14	14	-	11	11	-	-	-	-	19	19
55	-	5	5	-	8	8	-	-	-	-	21	21
56	-	9	9	-	5	5	-	-	-	-	21	21
57	-	5	5	-	5	5	-	5	5	-	12	12
58	-	9	9	-	7	7	-	-	-	-	7	7
59	-	5	5	-	3	3	-	-	-	-	2	2
60	-	5	5	-	2	2	-	-	-	-	5	5
61	-	-	-	-	3	3	-	-	-	-	2	2
62	-	-	-	-	2	2	-	-	-	-	5	5
63	-	5	5	-	1	1	-	-	-	-	-	-
64	-	-	-	-	1	1	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-	-	-	-
66	-	-	-	-	-	-	-	-	-	-	-	-
67	-	5	5	-	-	-	-	5	5	-	-	-
Total ‰	484	516	1000	468	532	1000	483	517	1000	272	728	1000
Serial Numbers	-	-	-	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	1	-	-	4	-	-	1	-	-	2
Number of Fish Measured	-	-	210	-	-	897	-	-	217	-	-	432
Mean Length (cm)	-	-	43.91	-	-	43.10	-	-	36.47	-	-	43.05
Mean Weight (kg)	-	-	0.99	-	-	0.88	-	-	0.45	-	-	0.77
Total Weight Landed (tons)	-	-	223	-	-	437	-	-	90	-	-	240
Estimated Number Landed	-	-	223000	-	-	496189	-	-	199286	-	-	314182
Mesh(mm) or Hook(no.) Size	-	-	4 1/2 ¹	-	-	4 1/2 ¹	-	-	4 3/4 ¹	-	-	4 1/2 ¹
Range of Depths (fm)	-	-	40-45	-	-	34-120	-	-	65-170	-	-	35-100

¹ Mesh size - inches, manilla

TABLE 76
(cont'd)

LENGTH FREQUENCIES - AMERICAN PLAICE - 3N - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)											
	Landings after discard											
CATCHES/LANDINGS	July			August			September			October		
MONTH	Canada (Newfoundland)											
COUNTRY												
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	151-500											
25	-	-	-	-	-	-	-	-	-	-	1	1
26	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	2	-	2
29	-	-	-	-	-	-	-	-	-	1	1	2
30	5	5	10	7	-	7	-	-	-	-	3	3
31	14	-	14	-	2	2	-	-	-	7	2	9
32	28	14	42	5	7	12	-	-	-	5	6	11
33	10	14	24	-	2	2	8	-	8	12	15	27
34	24	19	43	11	2	13	4	8	12	32	16	48
35	52	19	71	27	18	45	4	8	12	31	25	56
36	24	33	57	27	7	34	20	4	24	31	18	49
37	19	28	47	23	7	30	20	8	28	32	18	50
38	47	33	80	27	21	48	47	8	55	41	17	58
39	28	38	66	34	11	45	47	20	67	52	26	78
40	10	28	38	43	5	48	28	20	48	27	28	55
41	28	19	47	21	16	37	67	-	67	35	20	55
42	33	24	57	43	14	57	39	20	59	30	29	59
43	28	33	61	41	14	55	32	-	32	18	24	42
44	28	24	52	36	18	54	32	12	44	33	15	48
45	19	14	33	23	23	46	39	12	51	29	25	54
46	10	5	15	18	21	39	43	20	63	28	19	47
47	14	19	33	36	23	59	43	12	55	22	20	42
48	10	19	29	25	27	52	32	16	48	6	16	22
49	-	14	14	9	23	32	24	12	36	9	23	32
50	10	19	29	5	50	55	12	32	44	1	22	23
51	-	24	24	2	36	38	-	39	39	3	22	25
52	-	19	19	5	32	37	8	28	36	-	25	25
53	-	14	14	-	25	25	8	12	20	-	16	16
54	-	42	42	-	21	21	-	28	28	-	16	16
55	-	24	24	-	23	23	-	24	24	-	16	16
56	-	5	5	-	14	14	-	24	24	-	6	6
57	-	5	5	-	25	25	-	32	32	-	7	7
58	-	5	5	-	9	9	-	12	12	-	5	5
59	-	-	-	-	11	11	-	16	16	-	5	5
60	-	-	-	-	9	9	-	12	12	-	3	3
61	-	-	-	-	9	9	-	-	-	-	-	-
62	-	-	-	-	5	5	-	-	-	-	1	1
63	-	-	-	-	-	-	-	-	-	-	2	2
64	-	-	-	-	2	2	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-	-	1	1
66	-	-	-	-	-	-	-	4	4	-	-	-
67	-	-	-	-	-	-	-	4	4	-	-	-
Total ‰	441	559	1000	468	532	1000	557	447	1004	487	514	1001
Serial Numbers	-	-	-	-	-	-	-	-	-	-	-	-
Number of Samples	-	-	1	-	-	2	-	-	1	-	-	5
Number of Fish Measured	-	-	211	-	-	439	-	-	253	-	-	1156
Mean Length (cm)	-	-	41.63	-	-	45.17	-	-	45.83	-	-	42.27
Mean Weight (kg)	-	-	0.77	-	-	1.05	-	-	1.17	-	-	0.88
Total Weight Landed (tons)	-	-	418	-	-	1074	-	-	654	-	-	2878
Estimated Number Landed	-	-	551238	-	-	1024970	-	-	551540	-	-	3294028
Mesh(mm) or Hook(no.) Size	-	-	4 1/2 ¹	-	-	4 1/2 ¹	-	-	4 1/2 ¹	-	-	4 1/2 ²
Range of Depths (fm)	-	-	33-120	-	-	38-160	-	-	40-105	-	-	32-130

¹ Mesh size - inches, manilla² Mesh size - inches, manilla and nylon

TABLE 76 LENGTH FREQUENCIES - AMERICAN PLAICE - 3N - 1964
 (cont'd)

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl					
	(Commercial)					
CATCHES/LANDINGS	Landings after discard					
MONTH	November			December		
COUNTRY	Canada (Newfoundland)					
SEX	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	151-500					
24	-	-	-	1	-	1
25	-	-	-	1	-	1
26	-	-	-	-	-	-
27	-	1	1	-	2	2
28	1	-	1	-	2	2
29	1	1	2	4	2	6
30	4	1	5	5	3	8
31	4	4	8	5	4	9
32	8	3	11	14	9	23
33	12	3	15	11	5	16
34	11	9	20	16	14	30
35	16	10	26	17	16	33
36	24	8	32	20	14	34
37	20	11	31	33	7	40
38	29	8	37	30	18	48
39	39	12	51	29	16	45
40	34	26	60	33	12	45
41	27	20	47	27	12	39
42	35	26	61	39	14	53
43	35	28	63	27	17	44
44	31	24	55	35	17	52
45	28	18	46	29	10	39
46	26	25	51	34	15	49
47	24	18	42	31	15	46
48	18	21	39	36	19	55
49	16	27	43	22	16	38
50	8	24	32	13	14	27
51	4	28	32	6	17	23
52	-	29	29	5	28	33
53	1	31	32	1	27	28
54	-	28	28	-	19	19
55	-	24	24	-	18	18
56	-	15	15	-	12	12
57	-	20	20	-	23	23
58	-	10	10	-	18	18
59	-	11	11	-	15	15
60	-	4	4	-	7	7
61	-	5	5	-	6	6
62	-	1	1	-	3	3
63	-	1	1	-	2	2
64	-	1	1	-	5	5
65	-	1	1	-	2	2
66	-	3	3	-	2	2
67	-	1	1	-	-	-
68	-	1	1	-	-	-
69	-	1	1	-	-	-
70	-	-	-	-	1	1
71	-	1	1	-	-	-
72	-	-	-	-	-	-
73	-	-	-	-	-	-
74	-	1	1	-	-	-
Total ‰	456	545	1001	524	478	1002
Serial Numbers	-	-	-	-	-	-
Number of Samples	-	-	6	-	-	5
Number of Fish Measured	-	-	1582	-	-	1092
Mean Length (cm)	-	-	44.81	-	-	44.36
Mean Weight (kg)	-	-	1.10	-	-	1.03
Total Weight Landed (tons)	-	-	2588	-	-	1792
Estimated Number Landed	-	-	2352998	-	-	1731738
Mesh(mm) or Hook(no.) Size	-	-	4 1/2 ¹	-	-	4 1/4 - 5 ¹
Range of Depths (fm)	-	-	34-120	-	-	30-125

¹ Mesh size - inches - manilla, nylon, courelene

GEAR	Otter Trawl		
	(Research)		
CATCHES/LANDINGS	Catches		
MONTH	July		
COUNTRY	Poland		
SEX	♂	♀	Tot.
TONNAGE		NK	
12	-	-	3
13	-	-	3
14	-	-	1
15	-	-	4
16	-	-	9
17	-	-	18
18	-	-	34
19	-	-	30
20	-	-	32
21	-	-	41
22	-	-	76
23	-	-	122
24	-	-	95
25	-	-	77
26	-	-	45
27	-	-	71
28	-	-	76
29	-	-	46
30	-	-	75
31	-	-	28
32	-	-	28
33	-	-	26
34	-	-	10
35	-	-	14
36	-	-	6
37	-	-	6
38	-	-	5
39	-	-	5
40	-	-	4
41	-	-	1
42	-	-	-
43	-	-	-
44	-	-	4
45	-	-	3
46	-	-	-
47-61	-	-	4
Total ‰	-	-	1000
Serial Numbers	-	-	-
Number of Samples	-	-	-
Number of Fish Measured	-	-	776
Mean Length (cm)	-	-	25.8
Mean Weight (kg)	-	-	-
Total Weight Landed (tons)	-	-	-
Estimated Number Landed	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	100
Range of Depths (fm)	-	-	-

TABLE 78

LENGTH FREQUENCIES - AMERICAN PLAICE - 4T - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl								
	(Commercial)								
CATCHES/LANDINGS	Landings								
MONTH	July			August			October		
COUNTRY	Canada (Maritimes)								
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	51-150			26-50			51-150		
28	-	-	-	-	-	-	18	-	18
29	9	-	9	-	-	-	9	-	9
30	28	-	28	-	5	5	18	-	18
31	28	9	37	5	35	40	28	-	28
32	46	-	46	20	50	70	64	-	64
33	83	-	83	10	80	90	55	-	55
34	92	9	101	15	95	110	73	-	73
35	46	18	64	30	55	85	119	9	128
36	128	18	146	10	105	115	129	18	147
37	46	28	74	-	90	90	92	18	110
38	73	28	101	5	60	65	28	9	37
39	18	37	55	-	25	25	28	-	28
40	18	37	55	-	55	55	28	18	46
41	18	28	46	-	20	20	18	28	46
42	9	28	37	-	30	30	18	18	36
43	18	18	36	-	35	35	18	18	36
44	-	9	9	-	30	30	9	46	55
45	-	18	18	-	15	15	9	18	27
46	9	-	9	-	30	30	-	-	-
47	-	-	-	-	10	10	18	-	18
48	-	-	-	-	5	5	-	-	-
49	-	-	-	-	20	20	-	-	-
50	9	-	9	-	-	-	-	-	-
51	-	9	9	-	15	15	-	9	9
52	-	-	-	-	-	-	-	-	-
53	-	-	-	-	-	-	-	-	-
54	-	18	18	-	5	5	-	-	-
55	-	-	-	-	5	5	-	-	-
56	-	-	-	-	15	15	-	9	9
57	-	9	9	-	5	5	-	-	-
58	-	-	-	-	-	-	-	-	-
59	-	-	-	-	5	5	-	-	-
60	-	-	-	-	-	-	-	-	-
61	-	-	-	-	-	-	-	-	-
62	-	-	-	-	-	-	-	-	-
63	-	-	-	-	5	5	-	-	-
Total ‰	678	321	999	95	905	1000	779	218	997
Serial Numbers	-	-	128	-	-	129	-	-	130
Number of Samples	-	-	1	-	-	1	-	-	1
Number of Fish Measured	74	35	109	19	181	200	85	24	109
Mean Length (cm)	35.7	40.9	37.4	34.1	38.5	38.1	35.8	42.0	37.2
Mean Weight (kg)	-	-	0.51	-	-	0.63	-	-	0.50
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	4 3/8 ¹	-	-	4 1/2 ¹	-	-	4 5/8 ¹
Range of Depths (fm)	-	-	18-20	-	-	15-20	-	-	30-34

¹ Mesh size - inches

TABLE 79

LENGTH FREQUENCIES - AMERICAN PLAICE - 4W - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Research)					
	Catches					
CATCHES/LANDINGS	June			July		
MONTH	Poland					
COUNTRY	NK					
SEX	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	NK					
12	-	-	-	-	-	4
13	-	-	-	-	-	4
14	-	-	-	-	-	11
15	-	-	9	-	-	33
16	-	-	21	-	-	63
17	-	-	30	-	-	51
18	-	-	38	-	-	22
19	-	-	30	-	-	7
20	-	-	43	-	-	22
21	-	-	17	-	-	37
22	-	-	47	-	-	92
23	-	-	77	-	-	81
24	-	-	38	-	-	77
25	-	-	98	-	-	22
26	-	-	26	-	-	26
27	-	-	21	-	-	44
28	-	-	13	-	-	44
29	-	-	34	-	-	44
30	-	-	60	-	-	44
31	-	-	56	-	-	51
32	-	-	56	-	-	51
33	-	-	81	-	-	33
34	-	-	47	-	-	48
35	-	-	38	-	-	26
36	-	-	30	-	-	18
37	-	-	30	-	-	-
38	-	-	30	-	-	22
39	-	-	4	-	-	4
40	-	-	13	-	-	-
41	-	-	4	-	-	-
42	-	-	-	-	-	4
43	-	-	-	-	-	-
44	-	-	9	-	-	4
Total ‰	-	-	1000	-	-	1000
Serial Numbers	-	-	-	-	-	-
Number of Samples	-	-	-	-	-	-
Number of Fish Measured	-	-	234	-	-	272
Mean Length (cm)	-	-	26.6	-	-	25.5
Mean Weight (kg)	-	-	-	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	100	-	-	100
Range of Depths (fm)	-	-	-	-	-	-

TABLE 80

LENGTH FREQUENCIES - WITCH - 4R-4S-4V - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl		
CATCHES/LANDINGS	(Commercial)		
MONTH	Landings		
COUNTRY	September		
SEX	Canada (Maritimes)		
TONNAGE	♂	♀	Tot.
	51-150		
34	-	-	10
35	-	-	30
36	-	-	30
37	-	-	10
38	-	-	40
39	-	-	50
40	-	-	30
41	-	-	60
42	-	-	40
43	-	-	80
44	-	-	100
45	-	-	120
46	-	-	50
47	-	-	90
48	-	-	70
49	-	-	40
50	-	-	50
51	-	-	10
52	-	-	10
53	-	-	50
54	-	-	30
Total ‰	-	-	1000
Serial Numbers	-	-	133
Number of Samples	-	-	1
Number of Fish Measured	-	-	100
Mean Length (cm)	-	-	44.5
Mean Weight (kg)	-	-	0.57
Total Weight Landed (tons)	-	-	-
Estimated Number Landed	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	3 1/2 ¹
Range of Depths (fm)	-	-	125-150

¹ Mesh size - inches

TABLE 81 LENGTH FREQUENCIES - WITCH - 4R - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl			Danish Seine		
	(Commercial)					
CATCHES/LANDINGS	Landings					
MONTH	September			June		
COUNTRY	Canada (Maritimes)					
SEX	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	151-500			26-50		
32	-	-	15	-	-	-
33	-	-	35	5	-	5
34	-	-	30	30	-	30
35	-	-	45	30	10	40
36	-	-	70	65	5	70
37	-	-	90	65	10	75
38	-	-	75	45	15	60
39	-	-	105	50	35	85
40	-	-	75	55	60	115
41	-	-	45	35	25	60
42	-	-	60	5	50	55
43	-	-	35	10	75	85
44	-	-	70	5	35	40
45	-	-	50	5	35	40
46	-	-	25	5	45	50
47	-	-	35	5	30	35
48	-	-	30	-	35	35
49	-	-	40	-	30	30
50	-	-	40	-	30	30
51	-	-	15	-	25	25
52	-	-	5	-	15	15
53	-	-	5	-	5	5
54	-	-	-	-	-	-
55	-	-	5	-	-	-
56	-	-	-	-	5	5
57	-	-	-	-	10	10
Total ‰	-	-	1000	415	585	1000
Serial Numbers	-	-	131	-	-	132
Number of Samples	-	-	1	-	-	1
Number of Fish Measured	-	-	200	83	117	200
Mean Length (cm)	-	-	41.0	38.1	44.4	41.8
Mean Weight (kg)	-	-	0.51	-	-	0.55
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	3 1/2 ¹	-	-	4 1/2 ¹
Range of Depths (fm)	-	-	130-145	-	-	54-65

¹ Mesh size - inches

TABLE 82

LENGTH FREQUENCIES - WITCH - 4T - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)											
	Landings											
CATCHES/LANDINGS	June			July			July			September		
MONTH	Canada (Maritimes)											
COUNTRY												
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	51-150						151-500			51-150		
30	-	-	-	-	-	-	-	-	5	-	-	-
31	-	-	-	-	-	-	-	-	-	15	5	20
32	-	-	-	10	-	10	-	-	25	-	10	10
33	-	-	-	-	-	-	-	-	10	20	-	20
34	5	-	5	10	-	10	-	-	35	25	75	100
35	5	-	5	40	10	50	-	-	50	20	45	65
36	10	-	10	20	-	20	-	-	50	30	40	70
37	-	-	-	40	-	40	-	-	100	25	70	95
38	10	-	10	10	10	20	-	-	110	30	50	80
39	10	-	10	50	-	50	-	-	85	10	40	50
40	55	-	55	30	10	40	-	-	85	10	30	40
41	45	-	45	50	10	60	-	-	55	5	30	35
42	35	5	40	50	10	60	-	-	65	10	30	40
43	60	10	70	90	40	130	-	-	40	30	25	55
44	50	5	55	10	50	60	-	-	30	20	15	35
45	40	5	45	20	30	50	-	-	25	10	15	25
46	70	-	70	-	30	30	-	-	20	5	15	20
47	50	-	50	-	20	20	-	-	20	-	25	25
48	30	20	50	-	40	40	-	-	55	5	35	40
49	30	30	60	-	40	40	-	-	60	5	25	30
50	35	5	40	-	70	70	-	-	40	5	5	10
51	30	25	55	-	40	40	-	-	5	-	25	25
52	20	30	50	10	10	20	-	-	10	-	30	30
53	20	25	45	-	-	-	-	-	-	-	20	20
54	20	15	35	-	30	30	-	-	10	-	10	10
55	-	45	45	-	10	10	-	-	-	-	10	10
56	-	15	15	-	20	20	-	-	5	-	15	15
57	-	25	25	-	40	40	-	-	5	-	10	10
58	-	15	15	-	20	20	-	-	-	-	5	5
59	-	25	25	-	20	20	-	-	-	-	5	5
60	-	40	40	-	-	-	-	-	-	-	5	5
61	-	10	10	-	-	-	-	-	-	-	-	-
62	-	15	15	-	-	-	-	-	-	-	-	-
63	-	5	5	-	-	-	-	-	-	-	-	-
Total ‰	630	370	1000	440	560	1000	-	-	1000	280	720	1000
Serial Numbers	-	-	136	-	-	134	-	-	137	-	-	135
Number of Samples	-	-	1	-	-	1	-	-	1	-	-	1
Number of Fish Measured	126	74	200	44	56	100	-	-	200	56	144	200
Mean Length (cm)	45.3	54.3	48.6	40.2	48.9	45.1	-	-	41.1	38.6	42.3	41.3
Mean Weight (kg)	-	-	1.09	-	-	-	-	-	0.49	-	-	0.34
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	4 1/2 ¹	-	-	4 3/4 ¹	-	-	3 1/2 ¹	-	-	4 1/8 ¹
Range of Depths (fm)	-	-	100-125	-	-	50-70	-	-	130-150	-	-	100-125

¹ Mesh size - inches

GEAR	Otter Trawl (Commercial)					
	Landings					
CATCHES/LANDINGS	February			March		
MONTH	Canada (Maritimes)					
COUNTRY						
SEX	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	151-500					
29	2	-	2	-	-	-
30	7	4	11	-	-	-
31	2	-	2	-	-	-
32	4	-	4	-	-	-
33	13	2	15	5	-	5
34	11	-	11	15	-	15
35	9	-	9	-	-	-
36	13	-	13	-	-	-
37	31	4	35	-	-	-
38	16	4	20	25	5	30
39	23	14	37	40	-	40
40	53	5	58	55	5	60
41	56	23	79	65	10	75
42	53	18	71	90	-	90
43	49	29	78	65	-	65
44	45	31	76	35	5	40
45	38	29	67	35	10	45
46	16	49	65	20	15	35
47	11	65	76	20	20	40
48	4	47	51	30	10	40
49	4	45	49	15	20	35
50	2	44	46	25	30	55
51	-	18	18	-	25	25
52	2	16	18	5	25	30
53	4	49	53	-	25	25
54	-	4	4	-	50	50
55	-	13	13	-	15	15
56	-	7	7	-	60	60
57	-	5	5	-	50	50
58	-	-	-	-	30	30
59	-	4	4	-	20	20
60	-	2	2	-	15	15
61	-	2	2	-	-	-
62	-	-	-	-	-	-
63	-	-	-	-	10	10
Total ‰	468	533	1001	545	455	1000
Serial Numbers	-	-	138&140	-	-	139
Number of Samples	-	-	2	-	-	1
Number of Fish Measured	257	294	551	109	91	200
Mean Length (cm)	41.0	47.4	44.4	42.7	53.1	47.4
Mean Weight (kg)	-	-	0.75	-	-	0.68
Total Weight Landed (tons)	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	4 1/2 ¹	-	-	4 1/2 ¹
Range of Depths (fm)	-	-	160	-	-	160-165

¹ Mesh size - inches

TABLE 84

LENGTH FREQUENCIES - WITCH - 4W - 1964

(FREQUENCIES IN % - 1 CM GROUPS)

GEAR	Otter Trawl				Danish Seine		
	(Commercial)				Landings		
CATCHES/LANDINGS	Landings						
MONTH	April				July		
COUNTRY	Canada (Maritimes)						
SEX	♂	♀	NK	Tot.	♂	♀	Tot.
TONNAGE	151-500				51-150		
30	-	-	6	6	-	-	-
31	-	-	-	-	-	-	-
32	-	-	6	6	-	-	-
33	-	-	13	13	-	-	-
34	6	-	26	32	-	-	-
35	-	-	58	58	-	-	-
36	19	-	26	45	-	-	-
37	58	6	19	83	-	-	-
38	70	-	-	70	-	-	-
39	83	13	6	102	23	16	39
40	70	19	-	89	8	23	31
41	38	6	-	44	86	16	102
42	38	13	-	51	86	39	125
43	19	38	-	57	94	8	102
44	19	51	-	70	55	23	78
45	13	58	-	71	55	62	117
46	6	32	-	38	16	31	47
47	6	26	-	32	55	39	94
48	-	51	-	51	23	8	31
49	-	32	-	32	23	31	54
50	-	19	-	19	16	8	24
51	-	13	-	13	8	39	47
52	-	-	-	-	-	31	31
53	-	6	-	6	-	23	23
54	-	-	-	-	-	8	8
55	-	6	-	6	-	8	8
56	-	6	-	6	-	16	16
57	-	-	-	-	-	16	16
58	-	-	-	-	-	-	-
59	-	-	-	-	-	8	8
Total %	445	395	160	1000	548	453	1001
Serial Numbers	-	-	-	141	-	-	142
Number of Samples	-	-	-	1	-	-	1
Number of Fish Measured	70	62	25	157	70	58	128
Mean Length (cm)	39.7	45.8	34.9	41.3	43.9	47.5	45.5
Mean Weight (kg)	-	-	-	0.51	-	-	0.71
Total Weight Landed (tons)	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	-	4 3/4 ¹	-	-	5 ¹
Range of Depths (fm)	-	-	-	75-90	-	-	20

¹ Mesh size - inches

TABLE 85

LENGTH FREQUENCIES - YELLOWTAIL - 4Vs - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)						
	Landings						
CATCHES/LANDINGS	June			September			
MONTH	Canada (Maritimes)						
COUNTRY	♂	♀	Tot.	♂	♀	NK	Tot.
SEX	151-500						
TONNAGE							
21	-	-	-	-	-	5	5
22	-	-	-	-	-	5	5
23	-	-	-	-	-	5	5
24	-	-	-	5	-	-	5
25	-	-	-	-	-	9	9
26	-	-	-	-	5	5	10
27	-	-	-	28	5	5	38
28	5	2	7	42	5	5	52
29	5	-	5	33	9	-	42
30	2	5	7	18	14	-	32
31	-	-	-	28	-	-	28
32	3	3	6	37	18	-	55
33	28	8	36	56	18	-	74
34	38	5	43	93	37	-	130
35	32	10	42	33	28	-	61
36	30	12	42	37	65	-	102
37	32	38	70	28	65	-	93
38	42	58	100	33	42	-	75
39	45	32	77	23	37	-	60
40	32	62	94	5	14	-	19
41	15	35	50	-	42	-	42
42	8	75	83	5	14	-	19
43	22	25	47	-	5	-	5
44	5	18	23	-	9	-	9
45	12	40	52	-	-	-	-
46	10	50	60	-	5	-	5
47	2	75	77	-	5	-	5
48	-	35	35	-	5	-	5
49	-	15	15	5	5	-	10
50	-	12	12	-	-	-	-
51	-	8	8	-	-	-	-
52	-	-	-	-	-	-	-
53	-	3	3	-	-	-	-
54	-	2	2	-	-	-	-
55	-	-	-	-	-	-	-
56	-	-	-	-	-	-	-
57	-	-	-	-	-	-	-
58	-	2	2	-	-	-	-
Total ‰	368	630	998	509	452	39	1000
Serial Numbers	-	-	144-145	-	-	-	146
Number of Samples	-	-	2	-	-	-	1
Number of Fish Measured	-	-	400	-	-	-	214
Mean Length (cm)	37.7	42.4	40.7	33.3	37.0	24.6	34.6
Mean Weight (kg)	-	-	0.53	-	-	-	0.42
Total Weight Landed (tons)	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	4 1/2 ¹	-	-	-	4 3/4 ¹
Range of Depths (fm)	-	-	30-45	-	-	-	18

¹ Mesh size - inches

TABLE 86

LENGTH FREQUENCIES - YELLOWTAIL - 5Z - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl											
	(Commercial)											
CATCHES/LANDINGS	Landings											
MONTH	January			February			March			April		
COUNTRY	United States											
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	0-499											
27	1	-	1	-	-	-	-	-	-	-	-	-
28	1	-	1	-	-	-	-	-	-	-	-	-
29	1	-	1	-	-	-	1	-	1	1	-	1
30	3	-	3	-	-	-	2	-	2	1	-	1
31	4	1	5	6	1	7	4	-	4	-	-	-
32	15	9	24	14	1	15	7	1	8	13	-	13
33	39	11	50	27	10	37	33	8	40	23	1	24
34	66	39	105	68	21	89	40	40	80	40	6	46
35	62	36	98	73	30	103	60	52	112	55	21	76
36	56	44	100	84	56	141	77	53	130	69	28	97
37	65	51	116	62	54	117	60	42	102	73	36	109
38	60	77	137	61	59	120	49	64	113	67	48	115
39	28	60	88	26	67	93	23	73	96	43	51	94
40	16	66	82	15	63	78	15	74	89	26	65	91
41	8	60	68	8	59	67	5	54	59	15	72	87
42	3	34	37	2	41	42	4	62	66	2	72	74
43	3	34	37	3	41	45	-	41	41	4	50	54
44	-	16	16	1	19	20	2	23	25	2	43	45
45	-	13	13	-	12	12	-	14	14	-	30	30
46	-	7	7	-	5	5	-	9	9	3	21	24
47	-	4	4	-	5	5	-	4	4	-	6	6
48	-	3	3	-	2	2	-	4	4	-	9	9
49	-	1	1	-	1	1	-	1	1	-	1	1
50	-	2	2	-	-	-	-	-	-	-	-	-
51	-	-	-	-	-	-	-	1	1	-	-	-
52	-	-	-	-	-	-	-	-	-	-	-	-
53	-	-	-	-	-	-	-	-	-	-	-	-
54	-	-	-	-	-	-	-	-	-	-	2	2
Total ‰	432	568	1000	451	549	1000	382	618	1000	437	563	1000
Serial Numbers	-	-	-	-	-	-	-	-	-	-	-	-
Number of Samples	13	13	26	14	14	28	16	16	32	10	10	20
Number of Fish Measured	591	767	1358	597	716	1313	584	857	1441	408	499	907
Mean Length (cm)	35.99	38.88	37.63	36.08	39.19	37.79	36.14	39.20	38.03	36.74	40.81	39.03
Mean Weight (kg)	0.43	0.56	0.50	0.43	0.58	0.51	0.43	0.58	0.52	0.44	0.78	0.64
Total Weight Landed (tons)	951	1643	2594	898	1466	2364	760	1648	2408	734	1669	2403
Estimated Number Landed ¹	22302	29289	51591	20983	25535	46518	17647	28605	46252	16570	21346	37916
Mesh(mm) or Hook(no.) Size	-	-	4.5 ²	-	-	4.5 ²	-	-	4.5 ²	-	-	4.5 ²
Range of Depths (fm)	-	-	8-30	-	-	8-34	-	-	10-45	-	-	5-44

¹ Estimated number landed - hundreds² Mesh size - inches

TABLE 86 LENGTH FREQUENCIES - YELLOWTAIL - 5Z - 1964
(cont'd)

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl (Commercial)											
	Landings											
CATCHES/LANDINGS	May			June			July			August		
MONTH	United States											
COUNTRY	0-499											
SEX	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
TONNAGE	0-499											
25	-	-	-	-	-	-	2	-	2	-	-	-
26	-	-	-	-	-	-	2	-	2	-	-	-
27	-	-	-	-	-	-	5	-	5	-	-	-
28	2	-	2	-	-	-	4	2	6	-	-	-
29	8	-	8	1	-	1	25	1	26	9	-	9
30	3	-	3	1	-	1	28	2	30	7	-	7
31	10	1	10	4	-	4	31	14	45	12	-	12
32	24	-	24	6	1	7	64	37	101	9	-	9
33	44	9	53	20	8	28	61	62	122	26	-	26
34	63	11	74	31	14	45	40	61	102	60	4	65
35	90	20	110	58	20	78	27	90	118	44	32	77
36	83	41	124	73	45	118	14	89	103	84	40	123
37	60	43	103	56	62	118	4	99	104	43	62	106
38	47	40	87	41	83	123	-	80	80	31	85	117
39	44	50	94	32	69	101	-	56	56	14	65	79
40	22	72	94	15	73	88	1	44	45	18	107	125
41	10	51	61	7	72	79	-	29	29	7	80	87
42	6	54	60	-	60	60	-	13	13	9	50	59
43	4	28	32	3	55	58	-	6	6	-	36	36
44	-	31	31	-	34	34	-	2	2	-	18	18
45	-	16	16	-	27	27	-	3	3	-	13	13
46	-	1	1	-	17	17	-	-	-	-	16	16
47	-	4	4	-	6	6	-	-	-	-	4	4
48	-	3	3	-	3	3	-	-	-	-	7	7
49	-	1	1	-	1	1	-	-	-	-	2	2
50	-	-	-	-	1	1	-	-	-	-	2	2
51	-	-	-	-	1	1	-	-	-	-	-	-
52	-	2	2	-	1	1	-	-	-	-	2	2
Total ‰	522	478	1000	348	652	1000	308	692	1000	373	627	1000
Serial Numbers	-	-	-	-	-	-	-	-	-	-	-	-
Number of Samples	8	8	16	7	7	14	8	8	16	4	4	8
Number of Fish Measured	423	420	843	248	465	713	240	524	764	116	198	314
Mean Length (cm)	35.84	39.76	37.72	36.32	39.99	38.71	35.27	39.38	38.11	35.63	39.84	38.27
Mean Weight (kg)	0.41	0.72	0.56	0.43	0.73	0.62	0.39	0.57	0.51	0.40	0.59	0.52
Total Weight Landed (tons)	1139	1821	2960	655	2124	2779	867	2882	3749	1092	2739	3831
Estimated Number Landed ¹	27719	25422	53141	15497	29057	44554	22499	50492	72991	27445	46202	73647
Mesh(mm) or Hook(no.) Size	-	-	4.5 ²	-	-	4.5 ²	-	-	4.5 ²	-	-	4.5 ²
Range of Depths (fm)	-	-	35-58	-	-	20-52	-	-	18-40	-	-	19-36

¹ Estimated number landed - hundreds² Mesh size - inches

TABLE 86
(cont'd)

LENGTH FREQUENCIES - YELLOWTAIL - 5Z - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl											
	(Commercial)											
CATCHES/LANDINGS	Landings											
MONTH	September			October			November			December		
COUNTRY	United States											
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	0-499											
27	1	-	1	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-
29	1	-	1	4	-	4	-	-	-	-	-	-
30	10	-	10	12	2	14	6	-	6	4	2	6
31	31	6	37	21	6	28	25	2	27	19	4	23
32	46	15	61	34	13	47	63	12	75	38	13	51
33	48	15	63	58	30	88	61	22	84	44	30	75
34	55	26	81	47	37	85	65	34	99	52	35	88
35	64	25	89	66	40	106	52	45	98	44	38	81
36	64	38	102	77	21	98	51	24	75	48	24	72
37	41	42	83	66	35	100	60	33	92	67	26	93
38	42	59	101	43	41	84	56	62	118	60	23	83
39	14	76	90	32	53	84	20	55	75	47	34	81
40	8	79	87	18	70	88	16	63	79	28	42	70
41	6	57	63	7	51	57	4	52	56	21	50	71
42	-	51	51	1	45	46	1	31	32	7	46	53
43	-	36	36	-	29	29	1	33	33	2	53	55
44	-	24	24	-	18	18	-	23	23	1	38	39
45	-	12	12	-	9	9	-	13	13	-	25	25
46	-	6	6	-	8	8	-	11	11	-	19	19
47	-	1	1	-	3	3	-	1	1	-	6	6
48	-	-	-	-	3	3	-	1	1	-	5	5
49	-	-	-	-	-	-	-	-	-	-	5	5
50	-	-	-	-	-	-	-	2	2	-	-	-
Total ‰	432	568	1000	486	514	1000	483	517	1000	481	519	1000
Serial Numbers	-	-	-	-	-	-	-	-	-	-	-	-
Number of Samples	9	9	18	9	9	18	9	9	18	14	14	28
Number of Fish Measured	434	600	1034	515	547	1062	481	480	961	646	703	1349
Mean Length (cm)	34.85	39.01	37.21	35.34	38.62	37.03	35.08	38.84	37.03	36.10	39.62	37.93
Mean Weight (kg)	0.37	0.56	0.48	0.37	0.51	0.44	0.36	0.52	0.44	0.39	0.56	0.48
Total Weight Landed (tons)	985	1933	2918	1534	2274	3808	1157	1806	2963	1152	1800	2952
Estimated Number Landed ¹	26339	34677	61016	42011	44397	86408	32332	34653	66985	29708	32010	61718
Mesh(mm) or Hook(no.) Size	-	-	4.5 ²	-	-	4.5 ²	-	-	4.5 ²	-	-	4.5 ²
Range of Depths (fm)	-	-	20-34	-	-	22-35	-	-	20-40	-	-	12-39

¹ Estimated number landed - hundreds² Mesh size - inches

(Available on request from the Secretariat)

In accordance with a recommendation made by the Research and Statistics Committee at their Annual Meeting in 1962 and reaffirmed in 1965, Age/Length Keys and Frequencies will not be published but are to be deposited in the Secretariat and made available to Member Countries on request. The following Age/Length Keys and Frequencies for yellowtail are now on file in the Secretariat.

GEAR: Otter Trawl

United States

Division	Month
5Z	January-March April-June July-September October-December

TABLE 88

LENGTH FREQUENCIES - WINTER FLOUNDER - 4T - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl						Gill-Net					
	(Commercial)											
CATCHES/LANDINGS	Landings											
MONTH	July			September			October			June		
COUNTRY	Canada (Maritimes)											
SEX	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.	♂	♀	Tot.
TONNAGE	51-150			26-50			51-150			0-25		
24	-	-	-	10	5	15	-	-	-	-	-	-
25	-	-	9	25	5	30	-	-	-	-	-	-
26	-	-	9	25	20	45	-	-	-	-	-	-
27	-	-	27	30	45	75	-	-	20	-	-	-
28	-	-	82	60	15	75	-	-	20	20	-	20
29	-	-	109	90	65	155	-	-	98	-	-	-
30	-	-	100	55	65	120	-	-	98	-	10	10
31	-	-	91	50	50	100	-	-	49	30	20	50
32	-	-	109	25	65	90	-	-	147	20	40	60
33	-	-	136	10	40	50	-	-	167	10	50	60
34	-	-	127	20	45	65	-	-	98	-	50	50
35	-	-	91	10	25	35	-	-	69	-	80	80
36	-	-	27	-	35	35	-	-	29	-	30	30
37	-	-	9	5	25	30	-	-	59	-	110	110
38	-	-	18	-	20	20	-	-	49	10	70	100
39	-	-	9	-	30	30	-	-	59	10	50	60
40	-	-	9	-	10	10	-	-	20	-	130	130
41	-	-	36	-	10	10	-	-	10	-	90	90
42	-	-	-	-	-	-	-	-	10	-	70	70
43	-	-	-	-	5	5	-	-	-	-	60	60
44	-	-	-	-	5	5	-	-	-	-	20	20
45	-	-	-	-	-	-	-	-	-	-	10	10
46	-	-	-	-	-	-	-	-	-	-	-	-
47	-	-	-	-	-	-	-	-	-	-	-	-
48	-	-	-	-	-	-	-	-	-	10	10	10
Total ‰	-	-	998	415	585	1000	-	-	1002	100	900	1000
Serial Numbers	-	-	148	-	-	149	-	-	150	-	-	147
Number of Samples	-	-	1	-	-	1	-	-	1	-	-	1
Number of Fish Measured	-	-	110	83	117	200	-	-	102	-	-	100
Mean Length (cm)	-	-	32.2	29.3	32.4	31.1	-	-	33.3	32.3	38.1	37.6
Mean Weight (kg)	-	-	0.41	-	-	0.39	-	-	0.43	-	-	-
Total Weight Landed (tons)	-	-	-	-	-	-	-	-	-	-	-	-
Estimated Number Landed	-	-	-	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	-	-	4 1/2 ¹	-	-	4 5/8 ¹	-	-	4 5/8 ¹	-	-	5-6 ¹
Range of Depths (fm)	-	-	10-27	-	-	15-20	-	-	15-20	-	-	5

¹ Mesh size - inches

GEAR	Otter Trawl
CATCHES/LANDINGS	(Commercial)
MONTH	Landings
COUNTRY	May
TONNAGE	Canada (Maritimes)
	151-500
54-55	5
56-57	13
58-59	15
60-61	18
62-63	27
64-65	51
66-67	97
68-69	102
70-71	104
72-73	81
74-75	73
76-77	82
78-79	88
80-81	81
82-83	79
84-85	46
86-87	28
88-89	7
90-91	-
92-93	2
Total ‰	999
Serial Numbers	122-123
Number of Samples	2
Number of Fish Measured	546
Mean Length (cm)	73.4
Mean Weight (kg)	4.26
Total Weight Landed (tons)	-
Estimated Number Landed	-
Mesh(mm) or Hook(no.) Size	4 1/2 ¹
Range of Depths (fm)	-

¹ Mesh size - inches

TABLE 90

LENGTH FREQUENCIES - POLLOCK - 4X - 1964

(FREQUENCIES IN %/00 - 2 CM GROUPS)

GEAR	Otter Trawl
CATCHES/LANDINGS	(Commercial)
MONTH	Landings
COUNTRY	October
TONNAGE	Canada (Maritimes)
	51-150
38-39	11
40-41	11
42-43	18
44-45	54
46-47	90
48-49	46
50-51	25
52-53	14
54-55	36
56-57	14
58-59	25
60-61	14
62-63	43
64-65	43
66-67	36
68-69	32
70-71	54
72-73	75
74-75	68
76-77	72
78-79	100
80-81	72
82-83	14
84-85	22
86-87	7
88-89	4
Total %/00	1000
Serial Numbers	124-125
Number of Samples	2
Number of Fish Measured	279
Mean Length (cm)	65.0
Mean Weight (kg)	3.87
Total Weight Landed (tons)	-
Estimated Number Landed	-
Mesh(mm) or Hook(no.) Size	4 1/2 ¹
Range of Depths (fm)	35-60

¹ Mesh size - inches

TABLE 91

LENGTH FREQUENCIES - CUSK - 4X - 1964

(FREQUENCIES IN ‰ - 2 CM GROUPS)

GEAR	Otter Trawl (Commercial)
CATCHES/LANDINGS	Landings
MONTH	January
COUNTRY	Canada (Maritimes)
TONNAGE	151-500
48-49	21
50-51	41
52-53	67
54-55	83
56-57	104
58-59	114
60-61	114
62-63	155
64-65	114
66-67	93
68-69	47
70-71	26
72-73	21
Total ‰	1000
Serial Numbers	126
Number of Samples	1
Number of Fish Measured	193
Mean Length (cm)	60.4
Mean Weight (kg)	2.82
Total Weight Landed (tons)	-
Estimated Number Landed	-
Mesh(mm) or Hook(no.) Size	4 5/8 ¹
Range of Depths (fm)	50-60

¹ Mesh size - inches

TABLE 92

LENGTH FREQUENCIES - HERRING - 5Z - 1964

(FREQUENCIES IN ‰ - 1 CM GROUPS)

GEAR	Otter Trawl									
	(Commercial)									
CATCHES/LANDINGS	Catches									
MONTH	January	February	March	April	May	June	July	August	September	October
COUNTRY	USSR									
TONNAGE	NK									
14	15	-	-	-	-	3	-	-	-	-
15	9	-	-	-	-	3	-	-	-	-
16	13	-	-	-	-	4	1	1	-	-
17	29	-	-	-	-	5	10	3	-	-
18	44	4	-	-	-	2	18	13	-	-
19	44	22	-	-	-	4	11	20	12	9
20	88	53	-	-	-	9	36	39	16	15
21	116	120	-	-	-	18	71	69	28	23
22	122	146	-	20	-	22	126	70	53	23
23	142	129	1	62	19	43	180	139	125	74
24	102	69	2	57	54	79	202	224	186	141
25	58	45	21	36	88	118	157	192	186	179
26	34	72	47	34	81	72	72	106	140	155
27	46	96	126	138	133	94	40	45	78	110
28	62	88	286	246	227	212	44	36	73	100
29	46	97	271	248	263	218	26	29	59	109
30	26	44	161	113	118	78	6	11	44	62
31	4	15	57	38	17	16	-	3	-	-
32	-	-	26	8	-	-	-	-	-	-
33	-	-	2	-	-	-	-	-	-	-
Total ‰	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Serial Numbers	-	-	-	-	-	-	-	-	-	-
Number of Samples	4	2	2	3	2	19	34	48	17	7
Number of Fish Measured	1707	822	812	1218	467	7414	12180	17432	9411	7009
Mean Length (cm)	22.82	24.54	28.57	27.65	27.68	26.73	23.73	24.07	25.11	25.84
Mean Weight (kg)	-	-	-	0.163	0.170	0.174	0.143	0.174	0.187	0.149
Total Weight Landed (tons)	-	-	-	1497.2	9695.5	13662.2	16213.1	18475.8	14811.3	370.9
Estimated Number Landed	-	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size	40	40	40	40	40	40	40	40	40	40
Range of Depths (fm)	35-65	50-60	55-85	55-90	40-65	25-60	15-80	20-55	20-30	25-30

GEAR		Otter Trawl (Commercial)											
CATCHES/LANDINGS		Catches											
MONTH		April					June						
COUNTRY		USSR											
TONNAGE		NK											
YEAR-CLASS	AGE	‰ Frequency			Mean Length			‰ Frequency			Mean Length		
		♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
1959	5	-	-	-	-	-	-	-	-	105	-	-	26.6
1958	6	-	-	42	-	-	25.7	-	-	497	-	-	28.2
1957	7	-	-	101	-	-	28.7	-	-	398	-	-	29.3
1956	8	-	-	669	-	-	30.5	-	-	-	-	-	-
1955	9	-	-	143	-	-	32.1	-	-	-	-	-	-
1954	10	-	-	45	-	-	33.1	-	-	-	-	-	-
Total ‰		-	-	1000	-	-	-	-	-	1000	-	-	-
Serial Numbers		-	-	-	-	-	-	-	-	-	-	-	-
Number of Samples		-	-	3	-	-	-	-	-	3	-	-	-
Number of Fish Aged		-	-	286	-	-	-	-	-	296	-	-	-
Mean Age		-	-	8.05	-	-	-	-	-	6.29	-	-	-
Mean Weight (kg)		-	-	0.163	-	-	-	-	-	0.174	-	-	-
Total Weight Landed (tons)		-	-	1497.2	-	-	-	-	-	13662.2	-	-	-
Estimated Number Landed		-	-	-	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size		-	-	40	-	-	-	-	-	40	-	-	-
Range of Depths (fm)		-	-	55-90	-	-	-	-	-	25-60	-	-	-

TABLE 93
(cont'd)

AGE FREQUENCIES - HERRING - 5Z - 1964

(FREQUENCIES IN ‰)

GEAR		Otter Trawl (Commercial)											
CATCHES/LANDINGS		Catches											
MONTH		July						August					
COUNTRY		USSR											
TONNAGE		NK											
YEAR-CLASS	AGE	‰ Frequency			Mean Length			‰ Frequency			Mean Length		
		♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
1962	2	-	-	32	-	-	18.5	-	-	122	-	-	18.64
1961	3	-	-	234	-	-	21.7	-	-	260	-	-	21.7
1960	4	-	-	473	-	-	24.2	-	-	465	-	-	24.7
1959	5	-	-	162	-	-	26.6	-	-	130	-	-	26.6
1958	6	-	-	98	-	-	28.4	-	-	23	-	-	28.0
1957	7	-	-	-	-	-	-	-	-	-	-	-	-
1956	8	-	-	1	-	-	32.0	-	-	-	-	-	-
Total ‰		-	-	1000	-	-	-	-	-	1000	-	-	-
Serial Numbers		-	-	-	-	-	-	-	-	-	-	-	-
Number of Samples		-	-	7	-	-	-	-	-	6	-	-	-
Number of Fish Aged		-	-	706	-	-	-	-	-	600	-	-	-
Mean Age		-	-	4.06	-	-	-	-	-	3.67	-	-	-
Mean Weight (kg)		-	-	0.143	-	-	-	-	-	0.174	-	-	-
Total Weight Landed (tons)		-	-	-16213.1	-	-	-	-	-	-18475.8	-	-	-
Estimated Number Landed		-	-	-	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size		-	-	40	-	-	-	-	-	40	-	-	-
Range of Depths (fm)		-	-	15-80	-	-	-	-	-	20-55	-	-	-

TABLE 93
(cont'd)

AGE FREQUENCIES - HERRING - 52 - 1964

(FREQUENCIES IN ‰)

GEAR		Otter Trawl (Commercial)											
CATCHES/LANDINGS		Catches											
MONTH		September					October						
COUNTRY		USSR											
TONNAGE		NK											
YEAR-CLASS	AGE	‰ Frequency			Mean Length			‰ Frequency			Mean Length		
		♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.	♂♂	♀♀	Tot.
1961	3	-	-	200	-	-	24.0	-	-	75	-	-	23.4
1960	4	-	-	470	-	-	25.0	-	-	580	-	-	24.9
1959	5	-	-	186	-	-	26.8	-	-	240	-	-	26.6
1958	6	-	-	138	-	-	29.3	-	-	95	-	-	29.2
1957	7	-	-	6	-	-	31.0	-	-	10	-	-	32.0
Total ‰		-	-	1000	-	-	-	-	-	1000	-	-	-
Serial Numbers		-	-	-	-	-	-	-	-	-	-	-	-
Number of Samples		-	-	5	-	-	-	-	-	2	-	-	-
Number of Fish Aged		-	-	500	-	-	-	-	-	200	-	-	-
Mean Age		-	-	4.28	-	-	-	-	-	4.38	-	-	-
Mean Weight (kg)		-	-	0.187	-	-	-	-	-	0.149	-	-	-
Total Weight Landed (tons)		-	-	-14811.3	-	-	-	-	-	370.9	-	-	-
Estimated Number Landed		-	-	-	-	-	-	-	-	-	-	-	-
Mesh(mm) or Hook(no.) Size		-	-	40	-	-	-	-	-	40	-	-	-
Range of Depths (fm)		-	-	20-30	-	-	-	-	-	25-30	-	-	-

TABLE 94

AGE/LENGTH KEYS AND FREQUENCIES (HERRING) - 1964

(Available on request from the Secretariat)

In accordance with a recommendation made by the Research and Statistics Committee at their Annual Meeting in 1962 and reaffirmed in 1965, Age/Length Keys and Frequencies will not be published but are to be deposited in the Secretariat and made available to Member Countries on request. The following Age/Length Keys and Frequencies for herring are now on file in the Secretariat.

GEAR: Otter Trawl

U. S. S. R.

Division	Month
52	January March April June July August September October

