

Northwest Atlantic



Fisheries Organization

Serial No. N2703

NAFO SCS Doc. 96/12

SCIENTIFIC COUNCIL MEETING - JUNE 1996

Portuguese Research Report for 1995

by

M.L. Godinho, R. Alpoim, A. M. Ávila de Melo and E. Santos

Instituto Protugues de Investigaçao Maritima
Av. Brasilia 1400 Lisboa Portugal

A. Status of the fisheries

In 1995 the Portuguese nominal catches proceeding from NAFO Regulatory Area recorded 11,441 ton. This is the lowest value from the series since 1988, and less than half of the catches for in 1994 (30,156 tons) (Tab. I) .

Div. 3L was the only area where nominal catches increased from the previous year (168.2 in 1994 to 668.4 tons in 1995), due to an increase of the Greenland halibut catches and unquoted species such as Roughhead grenadier and skates, corresponding to more than 98% of the overall trawl catch in Div. 3L.

Nominal catches in Div. 3M present evident decrease in 1995, particularly for trawl , from 21,467 tons in 1994 to 6,290 in 95. Although half of the total nominal catches still occurred in Div. 3M, the contribute of the trawl catches in this Division to the total nominal catch decreased from 76% in 1994 to 54% in 1995. All the species caught by trawl decreased in 1995. About 59% of the catch was composed by unquoted species such as skates, wolffishes and roughhead grenadier.

In Div. 3N and 3O trawl catches also declined to half of the 1994 level. As for 1994 the Div. 3N catches were dominated by Greenland halibut (35%), skates (34.9%) and roughhead grenadier (19%), while in Div. 3O redfish represented more than 90% of the overall trawl catch.

Nominal catches of gillnets, representing about 12% of the total, also decreased from 1,930 tons in 1994 to 1,370 tons in 1995. Almost 70% of this value was taken in Div. 3M, mainly composed by cod, redfish and Greenland halibut (Table I). In Div. 3O red hake continues to be the most important species for gillnetters . In Div. 3N gillnet catch was almost null.

The Portuguese fleet operating in the NAFO Regulatory Area in 1995 was, as for 1994, composed of 12 trawlers and 4 gillnetters.

Based on the monitored fishing vessels during 1995 Greenland halibut was for the first time the priority species for the Portuguese trawl fleet. The corresponding fishing effort was concentrated in Div. 3L. This fact was mainly a consequence of the extremely poor yields observed in the 3M cod fishery from April onwards (Tab. 2B, Fig. 1 and 2).

As for gillnets, fishing effort continued to be concentrated in Flemish Cap mainly directed to cod.

B. Portuguese Annual Sampling Program

1. Biological Sampling

During 1995 biological sampling was obtained from three stern trawlers fishing in all Divisions from February to October. Two gillnetters were also sampled from April to July in Div. 3M and 3O. In all vessels biological sampling was conducted for the most abundant species in each haul, following the NAFO sampling recommendations.

Cod, American plaice, Greenland halibut, roughhead grenadier and redfish (*S. mentella*) were the trawl catches sampled in all Divisions. The same species caught by the gillnet fishery were also sampled plus witch flounder in Div. 3O (Tab. III). As usual information on age composition of cod catches, and more recently of Greenland halibut, were obtained for most of those catches. In addition, age/length keys of the Portuguese *S. mentella* catches, based on burned otoliths were also prepared for the first time for Div. 3L and 3M and respective age compositions are presented. As in previous years the redfish catches were dominated by *S. mentella* in all Divisions for both gears so this was the only *Sebastes* sampled.

For the above-mentioned species, length and age structure of the catches as well as respective mean lengths and mean weights in the catch and mean length and mean weight at age by Division and gear are presented from Tables VIII to XXVI and Fig. 6 to 34.

2. Catch and effort sampling.

The catch and effort data for 1995 Portuguese trawl and gillnet fisheries on NAFO Regulatory Area were obtained through the revision of skipper logbooks from 3 trawlers and 3 gillnetters, kindly supplied by their owners. All the information has been recorded and put on file on a daily basis as regards round weight of the catch by species and on a tow basis as regards fishing effort, positions and depths. The conversion factors used in each vessel were also used to convert its processed landings in catches.

Effort data obtained through the revision of the 1995 logbooks available were processed in order to convert the 1995 Portuguese effort, reported in fishing days on the 1995 Portuguese STATLANT 21-B, into NAFO standard effort units (Tab. II-A). The daily catch and effort data from the logbooks were also used to estimate the direct effort and CPUE for each of the target species/stocks, as well as the main by-catch species and depth range of the different fisheries, on a monthly basis. Data regarding directed effort and catch rates are presented in Table II-B and Tab. IV-A to VII-C, Fig. 1 to 5.

The 1995 data have been used to update the standardized trawl CPUE series for each stock from 1988 onwards. The observed monthly CPUEs were corrected by an additive model for the month and Division of each monthly observation. In this analysis, for each of the stocks, any observation corresponding to a month and a trawler with less than 10 hours of directed effort on that stock was rejected. The CPUEs for each stock considered are presented in Tables V and Fig. 3 to 5, with the associated standard errors (± 2 standard errors in the Figures) and coefficients of variation. This model is fully described in a previous paper (Ávila de Melo and Alpoim, 1995).

3. Comments on catch and effort data (based on the vessels sampled)

3.1. Cod in Division 3M

The 1995 3M cod trawl catch rate is the lowest value since 1988. This drastic drop shows the same rate of decline of the 1995 cod biomass from 1995 EC survey (Tab. V-A, Fig. 3A, 3B). These results are fully analyzed in Ávila de Melo and Alpoim, 1996.

3.2. Redfish in Divisions 3N and 3O.

The 3NO Redfish trawl catch rates (when corrected for the month and area of each observation) in the last two years are stable around the 0.575 ton/h. Despite the great variability, the 1994 and 1995 catch rates are at the highest level since 1990 (Tab. V-C, Fig. 4A).

3.3. Redfish in Division 3M

The 3M Redfish trawl catch rates show a great variation in the period between 1991 and 1995 with a high associated variability. Despite the wide fluctuations observed in the 3M redfish catch rate series, mainly since 1991, the CPUE value for 1995 is the lowest one recorded in the Portuguese series, and with a relatively small coefficient of variation. Redfish CPUEs fluctuation match with the fluctuations also observed in the redfish trawlable biomass given by the EC survey (Tab. V-C, Fig. 4A,4B).

3.4. Greenland halibut in Divisions 3L and 3N.

The 3LN analysis show a decrease in the combined catch rates from 1994 to 1995. When the Divisions are analyzed separately, catch rates are still declining in 1995 in Div. 3L. Meanwhile in Div. 3N the catch rate seems to be stable around 0.200 ton/h since the beginning of the deep water fishery in this Division in 1990, despite an isolated peak recorded in 1992 (Tab.V-E, Fig. 5).

This results are fully analyzed in Avila de Melo and Alpoim, 1996

4. Comments on length and age composition

4.1- Division 3L

Information on length composition from trawl catches in Div. 3L is available for Greenland halibut, roughhead grenadier and also some scarce information for red fish (*S.mentella*). Information on age composition of Greenland halibut is available only for the 3rd quarter.

4.1.1 - Greenland halibut

Information on length composition of Greenland halibut catches is available for February and June -October (Tab.XV-A, Fig. 19) covering a depth range from 650-1200 meters. Males were dominated by lengths between 34-56 cm although lengths up to 74 cm were present in the catch. For females dominant lengths ranged between 34-68 cm but lengths as large as 96 cm were also caught. A modal group is detected around 40-42 cm for males and 40-46 cm for females. Age composition (Tab. XV-B,C; Fig. 20) indicates a clear dominance of the 1990 year-class at age 5 for both sexes, followed by the 1991 at age 4. The data also indicates the presence of a range of ages between 3 and 10 for males and 3-15 for females.

4.1.2 - Roughhead grenadier

Length composition (anal length) of roughhead grenadier is available for the period June-October, also for a depths range 650-1200 meters. Data available indicates that catches were dominated by lengths between 10-20 cm for males and 10-25 cm for females, both sexes with a mode at 15-16 cm (Tab. XXII, Fig. 30).

4.2 - Division 3M

Biological information of catches developed in Div. 3M is available, for one or for both trawl and gillnet gears, for cod, redfish, American plaice, Greenland halibut and roughhead grenadier.

4.2.1 - Cod

Biological information of cod catches in Div. 3M is available for February, March and September for trawl and for May and July for gillnet. For both gears length and age composition are available.

Length composition of trawl catches represented by about 7400 fish measured in February and March (Tab VIII-A, Fig. 6) are distributed between a range of lengths from 33 cm to 100 cm, with a mode at 42 cm. Compared to 1994 the mean length in the catch increased from 41.2 cm in 1994 to 48.3 cm in 1995. Also the mean weight in the catch increased from .723 kg in 1994 to 1,180 kg in 1995. This increase is justified both by the annual increment of the 1991 year class, still dominant in 1995 at age 4 (Tab. VIII-B, Fig 8), and the observed increase of the range of lengths

caught in 1995.

The 1990 year-class is the second more dominant in 1995 at age 5. This year class that dominated the catches in 1993 (68%) and decreased notoriously in 1994 (18%) showed some improvement (26%) in the 1995 trawl catches. Ages older than 5, although present in the catch up to age 13, are poorly represented.

Information relative to September, although scarce (38 fish measured) confirms the dominance of the 1991 year class.

For gillnet fishery, some information is available for May and July (Tab. VIII-C, Fig. 6). Catches seems to be dominated by the 1991 year-class at age 4, with 44 cm mean length, followed by the 1990 one with 58.9 cm (Tab. VIII-D, Fig. 8). Ages 6 and 7 are poorly represented and ages older than these are completely absent. Compared to 1994 the actual information suggest the existence of a shrinkage in the range of the lengths caught by the gillnet in 1995, reflected in a decrease of the mean length of the catch from 64.5 cm in 1994 to 49.1 cm in 1995. Also a significant decrease of the mean weight in the catch is reflected in the data available, from about 3.000 kg in 1994 to 1.200 in 1995.

4.2.2 - Redfish

Both length and age composition of the redfish (*S. mentella*) catches are available for trawl and gillnet.

Information on length composition of trawl catches is available for the months of February, March, April and in smaller scale for August (Tab. XII-A, Fig. 12). The bulk of the catches was dominated by lengths between 25-41 cm, with two modes around 29 cm and 36 cm for males and 30 cm and 37 cm for females. The respective age composition (Tab. XII-b, Fig. 14) indicates a range of age groups between 4 and 25, with males dominated by age 10 and 12 and females dominated by ages 12 and 13 (Tab. XII-B, C; Fig. 14).

Gillnet catches sampled during May-July (Tab. XII-D, Fig. 13) were dominated by lengths between 28-43 cm for males and 30-44 cm for females. Both males and females present a mode at 37 cm. A decrease of about 2 cm and 100 gr was observed in the mean length and mean weight in the catch from 1994 to 1995.

The respective age composition (Tab. XII-E,F; Fig. 15) indicates a dominance of the 1979 and 1980 year-classes respectively at age 16 and 15 for males. Females with ages between 15 and 21 years old, corresponding to the 1980-1973 year-classes are the most well represented in the Portuguese gillnet catches.

4.2.3 - Greenland halibut

Biological information of the Greenland halibut catches in Div. 3M is available for trawl for March-April and June-September for a range of depths between 730-1280 meters (exception for March starting at 450 meters). An age length key was prepared only for the 3rd quarter, used as representing the annual age composition of the catch.

For the gillnet catches only information on length composition is available for April-July, covering depths between 450-1080 meters.

The male component of the trawl catches were mainly composed of lengths between 38 and 56 cm (Tab. XVI-A, Fig. 21) with a clear dominance of the 42-46 cm, and the strong 1990 year-class at age 5.

For females the bulk of the catches was composed of lengths between 36-82 cm also with a dominance of the 42-46 cm and the same 1990 year-class (Tab. XVI-B, C; Fig. 22). Lengths up to 95 cm and ages as older as 15 years also contributed to the female component of the catches although in a smaller percentage.

Greenland halibut caught with gillnet was dominated by fish with 42-58 cm for males and 40-64 for females, both sexes with a clear mode at 48 cm (Tab. XVI-D, Fig. 23). Information on age composition is not available.

4.2.4 - American plaice

Biological information of American plaice is rather scarce either for trawl or gillnet catches, probably a consequence

of the fact that this fishery is only caught as by-catch. Data are presented as a contribute to the knowledge of the evolution of those fisheries but conclusions based on that must be only regarded as suggestions.

Information available refers to length and age composition, this last one derived from the age-length key obtained for the July 1995 Flemish cap research survey.

Information on length composition from trawl catches suggest some dominance of fish with 36-54 cm for males and 44-56 cm for females (Tab. XIX-A). In terms of age composition data available suggest that the 1990 year-class at age 5 was the most represented for males. Females were dominated by the 1986 at age 9 (Tab. XIX B,C).

Information from gillnets suggest a dominance of lengths between 26-40 cm for males and 32-52 cm for females (Tab. XIX-D), with the 1990 and 1991 year-classes, respectively ages 5 and 4, dominant. Females also show a dominance of the 1990 year-class at age 5 but ages 6 to 9 also appear represented (Tab. XIX -E, F).

Data available suggest that the mean length in the catch is smaller for the gillnet catches than for the trawl catches. This can be a consequence of the fact that the trawl catches sampled came from depths between 150-475 meters while the gillnet ones came from 136-7 meters.

4.2.5 - Roughead grenadier

Information on length composition of roughead grenadier caught by trawl in Div. 3M (Tab. XXIII-A, Fig. 31) is very similar for both sexes, with a range of dominant lengths between 10-20 cm and a mode around 15-16 cm.

Data available for gillnet, based on a small sample during May is presented in Tab. XXIII-B, Fig. 33.

4.3 - Division 3N and 3O

Biological information of 3N and 3O catches is available for cod, redfish (*S. mentella*), Greenland halibut, roughead grenadier and witch flounder for trawl and gillnet.

4.3.1 - Cod

Information on cod trawl catches in Div. 3N, although presented in Tab. IX-A, is based on a scarce number of 34 fish measured and do not suggest any comment.

For cod in Div. 3O some information on length and age composition is available for trawl during February (Tab. X-A, Fig. 9) and for gillnet during May-June (Tab. X-C, Fig. 7) but in general terms the all information is very scarce and only the one relative to trawl, based on 266 fish measured, offer some comments. For this gear the information obtained suggest that catches were mainly composed of cod with lengths between 36-60 cm, with a mode at 45-48 cm. Age composition was dominated by the 1990 year-class at age 5, closely followed by age 6 (Tab. X-B, Fig. 9).

Compared with the information available for the same gear and Division in 1994, some decrease was observed for 1995 in the mean length and mean weight in the catch as well as in the mean length and mean weight-at-age.

4.3.2 - Redfish

Information of redfish (*S. mentella*) was obtained for trawl catches in Div 3N and Div. 3O and for gillnet in Div.3O.

In Div. 3N data obtained for trawl for February and May-August (Tab. XIII, Fig. 16) indicates that dominant lengths were very similar for males and females between 26 cm to 41 cm, both sexes with two clear modes respectively at 31 cm and 38 cm for males and around 32 cm and 40 cm for females. Compared to 1994 mean length and mean weight in the catch increased for 1995 about 4-5 cm in length and 150 g in weight.

In Div. 3O a very similar situation was observed (Tab. XIV-A, Fig. 17) including the increase observed in 1995 in the mean length and mean weight in the catch, relatively to 1994.

Data available for the gillnet catches in Div. 30 refers to length composition obtained during June and July (Tab. XIV-B, Fig. 18) and suggest that the bulk of the catches were dominant by lengths between 30-45 cm for both sexes. Males present some evidence of the presence of a mode around 40 cm and for females two modes are evident at 38 cm and 41 cm. In 1995 an increase was also observed in the mean length and mean weight in the catch relatively to 1994.

4.3.3 - Greenland halibut

Biological information from Greenland halibut catches is available for trawl in Div. 3N and for gillnet in Div. 30. Length and age composition was obtained for Div. 3N but only length composition is presented for Div. 30.

Greenland halibut trawl catches were intensively sampled in Div. 3N during February and April-August (Tab. XVII-A, Fig. 24). The bulk of the catches was dominated by lengths between 34-50 cm for males and 32-60 cm for females but lengths 62 to 90 cm are also represented in the female component, although with a reduced percentage. Males present a mode at 38-40 cm and were dominated by the 1991 year-class at age 4, followed by the 1990 year-class at age 5. Ages older than 8 were not observed. Females present a mode around 40-42 cm and were clearly dominated by the 1990 year-class at age 5. Ages 4 and 6 were the second ones more dominant but ages up to 15 were observed (Tab. XVII-B, Fig. 25). Mean length in the catch increased about 7 cm for both sexes in 1995 comparatively to 1994 and mean weight in the catch almost doubled.

For Greenland halibut gillnet catches information on length composition is available for May, June and July (Tab. XVIII, Fig. 26), for a range depths of 280-710 meters. Males were dominated by lengths between 36-50 cm, with a mode at 42 cm, while females were dominated by a range of lengths between 36-62 cm, with a mode at 46 cm. No age information is available for gillnet.

4.3.4 - American plaice

American plaice trawl catches are represented by scarce information, obtained either for Div. 3N and 30. For trawl catches in Div. 3N (Tab. XX, Fig. 27) some increased was observed in the mean length and mean weight in the catch, relatively to 1994.

Length composition of the gillnet catches for Div. 30 (Tab. XXI -B, Fig. 29) although also scarce presents a clear mode at 32 cm for males and three modes for females at 32 cm, 42 cm and 48 cm. There is no information on age composition.

4.3.5 - Roughead grenadier

Trawl catches of roughead grenadier are a by-catch of the Greenland halibut fishery and like this species were intensively sampled from April to August, covering depths between 300-1700 meters. Information on length composition, referred to anal length, indicates a dominance of lengths between 11-18 cm for males and 11-24 cm for females (Tab. XXIV, Fig. 32).

Information of the gillnet catches, presented in Tab. XXV, is considered to be too scarce to be commented.

4.3.6 - Witch flounder

Some information on length composition of witch flounder gillnet catches in Div. 30 is presented in Tab. XXVI. The information not presented by sex, shows with some evidence a mode group at 38 cm.

6- References

ÁVILA de MELO, A. M., ALPOIM, R. 1995. 'Portuguese Cod Fisheries in NAFO Divisions 3N and 3O, 1989-93'. NAFO Sci. Coun. Studies 23: 65-84.

ÁVILA de MELO, A. M., ALPOIM, R. 1996. 'Catch rate versus biomass trends for 3M cod, 1988-1995: why they don't match?'. In press.

ÁVILA de MELO, A. M., ALPOIM, R. 1996. 'Greenland halibut deepwater fishery in Divisions 3L and 3N: an analysis of catch rate trends from Portuguese trawlers, 1988 -1995.' In press.

TABLE I: PORTUGUESE NOMINAL CATCHES (mt) IN NAFO AREA, 1995

SPECIES	DIVISION								TOTAL 1995
	3L		3M		3N		3O		
	OT	GNS	OT	GNS	OT	GNS	OT	GNS	
Cod	0.1		974.4	348.9	3.5		11.1	15.4	1353
Redfish	0.2		693.9	353.9	76.6		1394.0	71.1	2590
American plaice	0.4		112.2	6.2	37.7		10.4	7.7	175
Yellowtail(1)									
Witch flounder	9.8		291.5	1.9	48.7		18.1	5.0	375
Greenland halibut	499.5		498.5	155.4	554.4	1.0	51.6	53.3	1814
Atlantic halibut	0.1		0.2	0.5	2.4		11.9	2.4	18
Roughhead grenadier(2)	111.9		927.1	47.6	301.9		10.7	2.3	1402
Anarhichas spp.	1.4		1354.2	30.6	2.5		11.6	0.4	1401
Hadocck								2.0	2
Pollock									
Red hake					0.1		1.1	228.4	230
Capelin									
Skates	45.0		1438.3	15.8	552.0		6.7	9.8	2068
Monkfish								1.9	2
Unidentified					1.6		1.3	11.2	14
TOTAL	668.4		6290.3	960.8	1581.4	1.0	1528.5	410.9	11441

(1) From the 1995 sampling, there were no yellowtail catches recorded.

(2) Reported as Roundnose grenadier in years before.

TABLE I: cont.

SPECIES \ YEAR	TOTAL 1995	TOTAL 1994	TOTAL 1993	TOTAL 1992	TOTAL 1991	TOTAL 1990	TOTAL 1989	TOTAL 1988
Cod	1353	2636	3651	5984	13357	15138	24129	12931
Redfish	2590	8609	9828	6581	12163	17810	18870	17072
American plaice	175	344	347	451	1288	714	1821	1791
Yellowtail(1)				1	10	11	5	
Witch flounder	375	573	289	849	1982	2254	16	12
Greenland halibut	1814	5967	8805	10539	13961	11170	3614	4194
Atlantic halibut	18	45	53	81	228	91		
Roughhead grenadier(2)	1402	2223	1969	2000	4486	3211	290	914
Anarhichas spp.	1401	3219	2302	1696	2843	1940		
Hadocck	2	10	10	166	83	17		
Pollock		13	41	28	421	11		
Red hake	230	267	366	466	1009	467		
Capelin						77		
Skates	2068	6238	7626	7017	23301	13569	663	1097
Monkfish	2		8	37	10	2		
Unidentified	14	12	238	325	174	852		
TOTAL	11441	30156	35532	36220	75314	67334	49408	38011

TABLE II - B : Breakdown of the 1995 Portuguese directed effort by species and division (%).

A - STERN TRAWL

DIVISION	G. HALIBUT	COD	SKATES	REDFISH	ROUGHEAD	G. A. PLAICE	TOTAL/DIV.
3N	18		11			6	35
3L	32					1	33
3M	6	15		8			29
3O				2		1	2
TOTAL/SPECIES	56	15	11	9		7	1

TABLE II - B: cont.

B - GILLNETS

DIVISION	COD	REDFISH	G. HALIBUT	RED HAKE	A. PLAICE	TOTAL/DIV.
3N						
3L						
3M	46	20	13		1	79
3O	2	4	2	12	1	21
TOTAL/SPECIES	48	24	15	12	1	

TABLE III: Intensity of sampling during 1995, by gear, species, division and month.

A- STERN TRAWL

SPECIES.	DIV.	MONTH	Nº OF SAMPLES	Nº FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS Nº	LENGTH RANGE
COD	3M	FEB.	29	4255	6031	509	30-110 cm
		MAR.	18	3148	3825	350	31-99 cm
		SEP.	1	38	53	38	35-65 cm
	3N	FEB.	1	34	31	34	26-68 cm
	3O	FEB.	6	266	415	134	30-82 cm
REDFISH <i>S.mentella</i>	3L	FEB.	1	244	78	136	21-48 cm
	3M	FEB.	18	1012	649	284	16-46 cm
		MAR.	20	2409	1225	389	18-48 cm
		APR.	6	1186	420	195	18-48 cm
		AUG.	2	106	53	106	19-43 cm
	3N	FEB.	1	103	46		
		MAY	3	64	29	64	26-41 cm
		JUN.	19	1252	651	120	17-42 cm
		JUL.	4	105	52	63	26-37 cm
		AUG.	1	39	22	39	28-42 cm
	3O	FEB.	5	210	136		
		JUN.	1	111	63	70	26-44 cm
		JUL.	3	645	382	126	19-46 cm
		AUG.	2	270	132	47	28-47 cm
AMERICAN PLAICE	3M	AUG.	1	31	46	31	41-63 cm
		SEP.	1	40	47	40	33-57 cm
	3N	FEB.	2	453	174	98	28-45 cm
		APR.	2	83	73	83	30-66 cm
		MAY	1	33	18	33	30-56 cm
	3O	FEB.	2	40	26	40	21-51 cm
GREENLAND HALIBUT	3L	FEB.	2	503	232	88	31-54 cm
		JUN.	15	1304	2095	501	29-96 cm
		JUL.	17	1659	1960	569	30-97 cm
		AUG.	41	4761	6576	770	29-97 cm
		SET.	27	2022	3803	601	26-100 cm
		OCT	13	870	1283	196	30-87 cm
	3M	MAR.	8	480	457	66	33-58 cm
		APR.	5	521	398	95	34-84 cm
		JUN.	4	234	506	215	22-91 cm
		JUL.	10	872	1590	452	31-97 cm
		AUG.	3	222	679	218	39-92 cm
		SET.	1	65	164	65	38-91 cm
		OCT	1	71	153		
	3N	FEB.	1	70	27		
		APR.	10	2381	2735	185	34-87 cm
		MAY	29	9308	9676	253	27-98 cm
		JUN.	25	4900	3971	341	25-87 cm
		JUL.	23	4141	4306	447	27-92 cm
		AUG.	7	1140	829	178	20-81 cm

TABLE III: count.

A- STERN TRAWL

SPECIES	DIV.	MONTH	N° OF SAMPLES	N° FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS	
						N°	LENGTH RANGE
ROUGHEAD GRENADIER	3L	JUN.	15	1016	858		
		JUL.	16	1543	902	166	10-34 cm
		AUG.	40	4814	3256	394	10-35 cm
		SEP.	26	1089	2017	226	10-34 cm
		OCT.	12	953	656		
	3M	MAR.	2	161	70	83	11-23 cm
		APR.	2	28	16	28	12-24 cm
		JUN.	4	245	260		
		JUL.	11	1062	690		
		AUG.	4	430	332		
		SEP.	1	69	90	69	12-31 cm
		OCT.	2	135	87		
	3N	APR.	10	2267	1025	145	10-29 cm
		MAY	29	7516	4039	187	10-35 cm
		JUN.	24	4130	2386	190	10-35 cm
		JUL.	23	3550	2201	217	10-35 cm
		AUG.	7	1290	896	146	10-34 cm

B- GILLNETS

SPECIES	DIV.	MONTH	N° OF SAMPLES	N° FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS	
						N°	LENGTH RANGE
COD	3M	MAY	6	261	330	124	38-83 cm
		JUL.	1	50	111	50	44-74 cm
	3O	MAY	2	39	39	35	42-65 cm
		JUN.	1	51	183	51	50-151 cm
REDFISH Mentella	3M	MAY	2	85	44		
		JUN.	7	700	506		
		JUL.	11	1100	825		
	3O	JUN.	11	707	519		
		JUL.	4	198	153		
AMERICAN PLAICE	3M	JUL.	2	190	131		
	3O	JUN.	5	338	165		
GREENLAND HALIBUT	3M	APR.	5	210	174		
		JUN.	3	300	353		
		JUL.	8	800	1053		
	3O	MAY	1	100	60		
		JUN.	12	826	824		
		JUL.	1	100	73		
ROUGHEAD GRENADIER	3M	MAY	3	168	148		
	3O	JUL.	3	76	62		
WITCH FLOUNDER	3O	JUN.	4	231	138		

TABLE IV - A: Portuguese trawl fishery: cpue and bycatch by month and division, for 1995.

DIVISION	TARGET SPECIES	MONTH	DEPTH RANGE (m)		C.P.U.E. (ton/hour)	MAIN BY-CATCH		TOTAL BYCATCH %
			MIN.	MAX.		SPECIES	%	
3M	COD	JAN.	330	385	0.262			
3M	COD	FEB.	229	805	1.369	REDFISH	3.7	3.9
3M	COD	MAR.	335	788	0.443	REDFISH	8.9	9.9
3M	COD	OCT.	207	258	0.661	SPOTTED WOLF.	5.3	9.0
3M	COD	NOV.	130	481	0.149	A. PLAICE	12.9	26.9
						SPOTTED WOLF.	11.3	26.9
3M	COD	DEC.	133	277	0.192	SPOTTED WOLF.	13.3	15.1
3M	REDFISH	MAR.	358	851	0.128	G. HALIBUT	13.5	23.1
3M	REDFISH	APR.	696	981	0.211	G. HALIBUT	13.7	22.5
3M	REDFISH	AUG.	260	475	0.227	SPOTTED WOLF.	7.3	14.7
3M	REDFISH	OCT.	544	733	0.378	ROUGHEAD G.	2.3	5.3
3M	REDFISH	NOV.	147	714	0.506	SPOTTED WOLF.	3.5	8.4
						COD	2.6	8.4
3M	REDFISH	DEC.	597	692	0.527	SPOTTED WOLF.	24.0	31.1
3N	REDFISH	FEB.	340	910	0.166	A. PLAICE	10.6	17.8
3O	REDFISH	FEB.	269	607	0.119	COD	6.0	13.3
3O	REDFISH	JUN.	325	646	0.772	G. HALIBUT	7.2	19.4
3O	REDFISH	JUL.	310	800	1.287	WITCH FL.	4.6	7.1
3O	REDFISH	AUG.	300	774	0.463	G. HALIBUT	4.9	9.3
3L	G. HALIBUT	FEB.	677	764	0.189	REDFISH	22.8	29.5
3L	G. HALIBUT	MAY	980	1175	0.063	ROUGHEAD G.	39.1	71.9
3L	G. HALIBUT	JUN.	733	1238	0.087	ROUGHEAD G.	27.4	31.5
3L	G. HALIBUT	JUL.	724	1156	0.114	ROUGHEAD G.	20.9	26.8
3L	G. HALIBUT	AUG.	648	1204	0.124	ROUGHEAD G.	21.2	27.4
3L	G. HALIBUT	SEP.	704	1076	0.125	ROUGHEAD G.	21.8	28.8
3L	G. HALIBUT	OCT.	682	1016	0.127	ROUGHEAD G.	23.8	30.0
3M	G. HALIBUT	JUN.	895	1262	0.071	ROUGHEAD G.	19.4	25.5
3M	G. HALIBUT	JUL.	938	1281	0.109	ROUGHEAD G.	23	32.2
3M	G. HALIBUT	AUG.	983	1130	0.099	ROUGHEAD G.	23	31.0
3M	G. HALIBUT	SEP.	922	1050	0.084	ROUGHEAD G.	33.4	36.8
3M	G. HALIBUT	OCT.	867	1030	0.141	ROUGHEAD G.	15.8	21.9
3N	G. HALIBUT	APR.	357	1600	0.245	SKATES	33.6	58.3
3N	G. HALIBUT	MAY	290	1550	0.230	SKATES	32.4	62.8
3N	G. HALIBUT	JUN.	315	1680	0.162	SKATES	27.8	59.5
3N	G. HALIBUT	JUL.	601	1700	0.167	ROUGHEAD G.	24.3	36.5
3N	G. HALIBUT	AUG.	527	1555	0.104	ROUGHEAD G.	18.2	31.3
3L	ROUGHEAD G.	MAY	980	1175	0.087	G. HALIBUT	28.1	60.9
3L	ROUGHEAD G.	AUG.	668	1188	0.062	G. HALIBUT	44.9	57.0
3N	ROUGHEAD G.	APR.	856	1312	0.135	G. HALIBUT	33.5	78.4
3N	ROUGHEAD G.	MAY	301	1240	0.129	SKATES	33.2	78.6
3N	ROUGHEAD G.	JUN.	320	1680	0.137	G. HALIBUT	33.7	65.8
3N	ROUGHEAD G.	JUL.	703	1108	0.131	G. HALIBUT	39.0	50.7
3N	ROUGHEAD G.	AUG.	794	1105	0.061	G. HALIBUT	42.1	54.0
3L	SKATES	MAY	964	1175	0.141	ROUGHEAD G.	29.7	60.7
3N	SKATES	APR.	357	1600	0.315	GREELAND H.	28.8	57.7
3N	SKATES	MAY	301	1700	0.340	GREELAND H.	23.6	52.7
3N	SKATES	JUN.	315	1680	0.178	GREELAND H.	34.4	63.9
3N	SKATES	JUL.	614	1700	0.391	GREELAND H.	28.9	38.5
3N	A. PLAICE	FEB.	405	1156	0.195	G. HALIBUT	17.0	24.9
3O	A. PLAICE	FEB.	456	654	0.237	REDFISH	19.0	36.1

TABLE IV - B: Portuguese gillnet fishery: cpue and bycatch by month and division, for 1995.

DIVISION	TARGET SPECIES	MONTH	DEPTH RANGE (m)		C.P.U.E. (Kg/net/day)	MAIN BY-CATCH		TOTAL BYCATCH
			MIN.	MAX.		SPECIES	%	%
3M	COD	MAR.	458	604	18.3	REDFISH	5.4	7.0
3M	COD	APR.	348	732	8.9	REDFISH	7.7	7.8
3M	COD	MAY	348	641	6.1	REDFISH	5.8	11.6
3M	COD	JUL.	130	472	2.7	REDFISH	7.0	15.7
3M	COD	AUG.	130	254	4.2	REDFISH	6.3	8.0
3M	COD	SEP.	126	205	5.8	A. PLAICE	1.0	1.6
3M	COD	OCT.	126	205	4.7	A. PLAICE	0.8	0.8
3O	COD	MAY			3.9	A. PLAICE	14.9	48.8
3O	COD	JUN.			5.0	RED HAKE	31.3	67.5
3O	COD	JUL.			5.2	RED HAKE	52.5	64.8
3M	REDFISH	APR.	512	641	9.6	G. HALIBUT	18.8	21.9
3M	REDFISH	MAY	677	732	1.2	G. HALIBUT	49.1	49.1
3M	REDFISH	JUN.	440	650	6.4	G. HALIBUT	33.4	34.7
3M	REDFISH	JUL.	260	1080	5.1	G. HALIBUT	33.1	34.4
3M	REDFISH	AUG.	296	296	13.1	G. HALIBUT	6.3	6.3
3M	REDFISH	OCT.	475	1005	36.9	G. HALIBUT	20.9	20.9
3M	REDFISH	NOV.	475	1005	78.4	G. HALIBUT	8.4	8.4
3O	REDFISH	MAY			2.9	G. HALIBUT	33.5	65.5
3O	REDFISH	JUN.	445	710	3.6	G. HALIBUT	28.4	57.4
3O	REDFISH	JUL.	336	550	7.5	RED HAKE	17.7	36.1
3M	G. HALIBUT	MAY	677	732	1.2	REDFISH	50.9	50.9
3M	G. HALIBUT	JUN.	440	930	5.6	REDFISH	37.1	37.9
3M	G. HALIBUT	JUL.	344	1080	2.9	REDFISH	54.6	54.9
3M	G. HALIBUT	AUG.	434	445	8.4	REDFISH	23.4	23.4
3M	G. HALIBUT	OCT.	329	1005	13.8	REDFISH	12.4	12.4
3M	G. HALIBUT	NOV.	421	445	3.0			0.0
3O	G. HALIBUT	MAY	290	540	2.4	REDFISH	30.6	62.7
3O	G. HALIBUT	JUN.	445	710	2.9	REDFISH	34.0	70.1
3O	RED HAKE	MAY			2.4	REDFISH	21.1	57.3
3O	RED HAKE	JUN.	155	560	10.7	COD	13.1	30.8
3O	RED HAKE	JUL.	336	550	14.7	COD	12.4	29.5

TABLE V - A: COD TRAWL CATCH RATES, 1988-95 :
mean annual cpue's corrected for the month
and division of each observation.

3M				
	CPUE	ST.ERROR	C.V.	
1988	0.507	0.133	64.1	1998
1989	0.821	0.048	17.4	1989
1990	0.485	0.100	65.0	1990
1991	0.694	0.434	88.5	1991
1992	0.890	0.222	50.0	1992
1993	0.973	0.185	56.9	1993
1994	0.998	0.167	44.3	1994
1995	0.493	0.172	85.5	1995

TABLE V - B: COD TRAWL CATCH RATES, 1988-95 :
mean cpue's by division corrected for
the year and month of each observation.

	CPUE	ST.ERROR	C.V.	
3M	0.744	0.051	49.3	3M

TABLE V - C: REDFISH TRAWL CATCH RATES, 1988-95 : mean annual cpue's corrected for the month and division of each observation.

3L				3NO			3LNO			3M		
	CPUE	ST.ERROR	C.V.	CPUE	ST.ERROR	C.V.	CPUE	ST.ERROR	C.V.	CPUE	ST.ERROR	C.V.
1988	0.515	0.071	27.7				0.507	0.178	70.2	0.576	0.040	11.9
1989	0.447	0.041	18.4				0.446	0.067	30.0	0.672	0.087	38.9
1990	0.460	0.042	24.1	0.417	0.082	39.5	0.447	0.045	33.1	0.655	0.047	24.0
1991	0.480	0.082	38.1	0.301	0.039	36.7	0.350	0.057	58.7	0.570	0.094	43.5
1992	0.375	0.045	16.8	0.416	0.097	61.7	0.435	0.072	49.4	0.840	0.177	36.5
1993	0.464			0.405	0.048	37.3	0.402	0.026	21.3	0.453	0.147	64.9
1994				0.584	0.131	59.2	0.570	0.154	71.6	0.794	0.202	44.0
1995				0.569	0.219	66.5	0.639	0.283	76.8	0.305	0.077	56.2

TABLE V - D: REDFISH TRAWL CATCH RATES, 1988-95 :
mean cpue's by division corrected for the
year and month of each observation.

	CPUE	ST.ERROR	C.V.	
3L	0.464	0.030	31.1	3L
3NO	0.432	0.035	50.2	3NO
3LNO	0.444	0.029	51.2	3LNO
3M	0.605	0.033	36.8	3M

TABLE V - E: GREENLAND HALIBUT TRAWL CATCH RATES, 1988-95 : mean annual cpue's corrected for the month
and division of each observation.

3L				3N			3LN			
	CPUE	ST.ERROR	C.V.	CPUE	ST.ERROR	C.V.	CPUE	ST.ERROR	C.V.	
1988	0.449	0.074	28.4				0.431	0.094	37.8	1998
1989	0.457	0.068	39.7				0.419	0.070	44.0	1989
1990	0.409	0.032	22.3	0.233			0.360	0.031	26.1	1990
1991	0.225	0.038	29.1	0.164	0.046	48.2	0.185	0.021	28.3	1991
1992	0.253	0.031	27.6	0.336	0.029	22.8	0.313	0.035	38.4	1992
1993	0.319	0.022	9.9	0.205	0.017	21.8	0.257	0.016	18.8	1993
1994	0.186			0.207	0.005	3.8	0.249	0.045	35.8	1994
1995	0.134	0.056	94.1	0.185	0.028	33.5	0.166	0.038	72.8	1995

TABLE V - F: GREENLAND HALIBUT TRAWL CATCH RATES, 1988-95 :
mean cpue's by division corrected for the
year and month of each observation.

	CPUE	ST.ERROR	C.V.	
3L	0.331	0.019	33.9	3L
3N	0.233	0.011	24.4	3N
3LN	0.289	0.013	34.0	3LN

TABLE VI : Portuguese stern trawl fishery : C.P.U.E. (ton/h), mean weight (Kg) in the catch, sex ratio and C.P.U.E. in number for males, females and total, by month and division, for 1995.

DIVISION	TARGET SPECIES	MONTH	C.P.U.E. (ton/hour)	MEAN WEIGHT (kg)	SEX RATIO	C.P.U.E (number/hour)		
						males	females	total
3M	COD	FEB.	1.369	1.191				1149
3M	COD	MAR.	0.443	1.155				383
3M	REDFISH	MAR.	0.128	0.557	0.605	139	91	229
3M	REDFISH	APR.	0.211	0.466	0.424	192	261	453
3M	REDFISH	AUG.	0.227	0.493	0.415	191	269	460
3N	REDFISH	FEB.	0.166	0.309	0.786	421	114	536
3O	REDFISH	FEB.	0.119	0.417	0.497	142	143	285
3O	REDFISH	JUN.	0.772	0.603	0.405	519	761	1280
3O	REDFISH	JUL.	1.287	0.600	0.380	816	1330	2145
3O	REDFISH	AUG.	0.463	0.449	0.466	480	551	1032
3L	G. HALIBUT	FEB.	0.189	0.414	0.292	133	324	457
3L	G. HALIBUT	JUN.	0.087	1.463	0.337	20	39	59
3L	G. HALIBUT	JUL.	0.114	1.060	0.314	34	73	107
3L	G. HALIBUT	AUG.	0.124	1.275	0.289	28	69	98
3L	G. HALIBUT	SEP.	0.125	1.458	0.337	29	57	86
3L	G. HALIBUT	OCT.	0.127	1.409	0.345	31	59	90
3M	G. HALIBUT	JUN.	0.071	2.023	0.279	10	25	35
3M	G. HALIBUT	JUL.	0.109	1.577	0.324	22	47	69
3M	G. HALIBUT	AUG.	0.099	2.739	0.196	7	29	36
3M	G. HALIBUT	SEP.	0.084	2.374	0.248	9	27	35
3M	G. HALIBUT	OCT.	0.141	1.984	0.277	20	51	71
3N	G. HALIBUT	APR.	0.245	1.048	0.192	45	189	234
3N	G. HALIBUT	JUN.	0.162	0.690	0.276	65	170	235
3N	G. HALIBUT	JUL.	0.167	0.892	0.256	48	139	187
3L	ROUGHEAD G.	AUG.	0.062	0.499	0.381	48	77	125
3N	ROUGHEAD G.	APR.	0.135	0.454	0.322	96	201	297
3N	ROUGHEAD G.	MAY	0.129	0.512	0.292	74	179	252
3N	ROUGHEAD G.	JUN.	0.137	0.486	0.262	74	208	281
3N	ROUGHEAD G.	JUL.	0.131	0.546	0.294	70	169	240
3N	ROUGHEAD G.	AUG.	0.061	0.547	0.321	36	76	112
3N	A. PLAICE	FEB.	0.195	0.446	0.228	100	338	438
3O	A. PLAICE	FEB.	0.237	0.407	0.473	276	307	583

TABLE VII - A: COD, 1995: cpue in number at age per hour, for the portuguese stern trawl fishery.

DIVISION	TARGET SPECIES	MONTH	3	4	5	6	7	8	9	10	11	12	13
3M	COD	FEB	38.3	711.1	278.6	65.2	18.6	4.2	23.5	8.7	0.5		0.4
3M	COD	MAR	1.6	228.2	121.6	26.4	2.0	0.5	2.4	0.6			

TABLE VII - B: REDFISH S. mentella, 1995: cpue in number at age per hour, for the portuguese stern trawl fishery.

DIVISION	TARGET SPECIES	SEX	MONTH	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25+
3M	REDFISH	MALE	MAR.	0.2	0.1	0.3	6.7	14.3	14.8	16.3	12.2	15.6	9.0	4.9	10.2	12.7	8.5	6.3	3.2	2.2	0.7	0.4	0.1	0.1	
3M	REDFISH	MALE	APR.	11.8	10.6	3.3	21.1	13.1	12.3	31.0	23.2	17.5	7.4	6.7	12.0	13.5	3.0								
3M	REDFISH	MALE	AUG.	8.7	34.7	8.7	4.3	17.3	8.7	8.7	21.7	26.0	13.0	8.7	8.7	4.3	4.3		4.3	4.3					
3M	REDFISH	FEMALE	MAR.	0.6	1.4	0.1	5.3	8.5	8.8	10.0	6.6	6.8	5.4	4.6	5.2	6.0	4.2	5.2	3.8	3.7	2.6	1.0	0.3	0.05	0.5
3M	REDFISH	FEMALE	APR.	18.2	14.8	6.5	20.9	24.2	23.4	13.5	16.7	14.8	29.2	16.8	13.7	11.2	7.2	9.8	8.6	3.4	6.1	0.3			
3M	REDFISH	FEMALE	AUG.	4.3	39.0	17.3	26.0	17.3	4.3	4.3	8.7	32.5	23.8	4.3	4.3	8.7	13.0	15.2	13.0	10.8	17.3	4.3			

TABLE VII - C: GREENLAND HALIBUT, 1995: cpue in number at age per hour, for the portuguese stern trawl fishery.

DIVISION	TARGET SPECIES	SEX	MONTH	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
3L	G. HALIBUT	MALE	JUN.	0.4	3.9	7.8	2.9	2.1	1.5	0.9	0.5	0.1					
3L	G. HALIBUT	MALE	JUL.	0.3	9.6	14.6	4.0	2.3	1.5	0.8	0.4	0.05					
3L	G. HALIBUT	MALE	AUG.	0.7	7.8	10.1	3.3	2.5	1.9	1.1	0.7	0.1					
3L	G. HALIBUT	MALE	SEP.	0.9	6.2	10.7	3.9	2.8	2.1	1.3	0.8	0.1					
3L	G. HALIBUT	MALE	OCT.	0.2	4.7	11.0	5.2	4.3	3.1	1.6	0.9	0.1					
3L	G. HALIBUT	FEMALE	JUN.	0.6	5.6	9.4	6.0	4.5	4.1	2.6	2.4	2.0	1.2	0.4	0.3	0.2	0.2
3L	G. HALIBUT	FEMALE	JUL.	1.1	17.5	23.1	11.7	7.5	4.7	2.4	1.9	1.6	1.1	0.3	0.2	0.2	0.2
3L	G. HALIBUT	FEMALE	AUG.	1.5	12.6	17.9	11.5	8.1	6.5	3.7	2.8	2.3	1.4	0.6	0.4	0.2	0.3
3L	G. HALIBUT	FEMALE	SEP.	1.3	8.6	13.3	8.1	6.1	6.0	3.9	3.3	2.9	1.9	0.7	0.5	0.4	0.2
3L	G. HALIBUT	FEMALE	OCT.	0.4	6.8	13.0	11.9	8.8	7.4	3.8	2.7	2.1	1.3	0.5	0.4		
3M	G. HALIBUT	MALE	JUN.	0.1	0.04	0.7	3.2	1.8	1.4	1.1	0.8	0.5	0.1				
3M	G. HALIBUT	MALE	JUL.	0.2	3.8	8.4	3.6	2.7	1.8	1.1	0.7	0.1					
3M	G. HALIBUT	MALE	AUG.		0.1	1.1	0.9	1.3	1.5	1.2	0.8	0.1					
3M	G. HALIBUT	MALE	SEP.		0.7	2.2	1.3	1.4	1.6	1.0	0.5	0.1					
3M	G. HALIBUT	MALE	OCT.		0.4	6.8	4.1	0.8	2.0	2.3	1.9	1.1	0.2				
3M	G. HALIBUT	FEMALE	JUN.	0.1	1.3	3.6	3.9	3.3	3.4	2.6	2.4	1.9	1.3	0.6	0.4	0.3	0.3
3M	G. HALIBUT	FEMALE	JUL.	0.3	5.4	10.6	7.5	5.4	5.1	3.5	3.0	2.5	1.7	0.7	0.6	0.3	0.3
3M	G. HALIBUT	FEMALE	AUG.		0.3	1.2	2.9	3.5	5.3	4.3	3.9	3.2	2.4	1.0	0.7	0.4	0.4
3M	G. HALIBUT	FEMALE	SEP.		1.0	2.7	3.5	3.5	4.6	2.5	2.5	2.7	2.1	0.8	0.7	0.2	0.2
3M	G. HALIBUT	FEMALE	OCT.		0.8	8.8	4.6	4.0	4.2	8.4	6.7	4.8	4.4	2.7	0.9	0.6	0.5
3N	G. HALIBUT	MALE	APR.		0.3	15.3	18.6	8.5	2.2	0.1							
3N	G. HALIBUT	MALE	JUN.		6.4	33.9	19.2	4.4	0.8	0.04							
3N	G. HALIBUT	MALE	JUL.		2.6	22.9	15.5	5.0	1.7	0.3							
3N	G. HALIBUT	FEMALE	APR.		2.2	30.0	79.5	40.6	15.5	10.2	5.6	3.5	1.1	1.0	0.03	0.01	0.1
3N	G. HALIBUT	FEMALE	JUN.	0.05	14.4	50.0	66.8	25.3	6.6	3.2	1.6	1.1	0.4	0.4	0.1	0.02	0.05
3N	G. HALIBUT	FEMALE	JUL.		5.5	27.3	57.7	29.9	8.4	4.7	2.3	1.6	0.8	0.9	0.1	0.04	0.1

TABLE VIII - A: COD DIV. 3M, 1995: length composition of the trawl catches.

LENGTH GROUP	FEB.	MAR.	SEP.=3rd Q.	1st Q.	TOTAL	LENGTH GROUP
30	1.1	0.5		0.9	0.9	30
33	26.6	2.3	26.3	19.3	19.3	33
36	64.0	11.2	26.3	48.0	48.0	36
39	149.6	73.1	105.3	126.4	126.4	39
42	207.8	231.8	157.9	215.1	215.1	42
45	160.8	213.7	184.2	176.8	176.8	45
48	110.5	150.8	184.2	122.7	122.7	48
51	73.5	103.7	184.2	82.6	82.7	51
54	52.8	71.5	52.6	58.4	58.4	54
57	42.6	55.8		46.6	46.6	57
60	31.2	34.2	26.3	32.1	32.1	60
63	17.6	25.7	52.6	20.1	20.1	63
66	7.7	11.7		8.9	8.9	66
69	9.5	2.5		7.4	7.4	69
72	7.5	1.8		5.7	5.7	72
75	9.5	3.0		7.5	7.5	75
78	7.4	1.9		5.7	5.7	78
81	5.9	1.2		4.5	4.5	81
84	4.8	0.3		3.4	3.4	84
87	3.2	1.5		2.7	2.7	87
90	2.4	1.7		2.2	2.2	90
93	2.0			1.4	1.4	93
96	1.0	0.2		0.8	0.8	96
99	0.4	0.1		0.3	0.3	99
102	0.4			0.3	0.3	102
105						105
108	0.3			0.2	0.2	108
TOTAL	1000	1000	1000	1000	1000	
No. SAMPLES	29	18	1	47	48	
SAMPLING WEIGHT(kg)	6031	3825	53	9856	9908	
No.F.MEASURED	4255	3148	38	7403	7441	
MEAN LENGTH(cm)	48.1	48.8	47.8	48.3	48.3	
MEAN WEIGHT (g)	1191	1155	1067	1180	1180	
DEPTH RANGE (m)	380/805	335/807	152/200	335/807	152/807	

TABLE VIII - B : COD, DIVISION 3M, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the trawl catches.

AGE	FEB.			MAR.			SEP. = 3rd Q.			1st Q.			TOTAL		
	AGE	MEAN	MEAN	AGE	MEAN	MEAN	AGE	MEAN	MEAN	AGE	MEAN	MEAN	AGE	MEAN	MEAN
	COMP.	LENGTH	WEIGHT	COMP.	LENGTH	WEIGHT	COMP.	LENGTH	WEIGHT	COMP.	LENGTH	WEIGHT	COMP.	LENGTH	WEIGHT
3	33.3	35.0	0.388	4.3	35.1	0.395	25.0	34.6	0.374	24.5	35.0	0.389	24.5	35.0	0.389
4	618.8	43.4	0.766	595.1	44.9	0.846	595.1	44.9	0.854	611.7	43.8	0.789	611.7	43.8	0.789
5	242.4	52.4	1.379	317.2	52.4	1.379	321.3	51.8	1.324	265.1	52.4	1.379	265.1	52.4	1.379
6	56.8	61.4	2.217	68.8	60.5	2.105	56.6	60.6	2.109	60.4	61.1	2.179	60.4	61.1	2.179
7	16.2	74.6	3.978	5.2	73.1	3.755	1.0	64.0	2.456	12.9	74.5	3.951	12.9	74.5	3.951
8	3.6	79.4	4.906	1.3	74.6	4.158	1.0	64.0	2.456	2.9	78.7	4.805	2.9	78.7	4.805
9	20.5	81.8	5.343	6.3	81.3	5.274				16.2	81.8	5.335	16.2	81.8	5.335
10	7.6	85.0	6.017	1.6	83.7	5.727				5.8	84.8	5.992	5.8	84.8	5.992
11	0.5	86.7	6.424	0.1	86.4	6.377				0.4	86.6	6.420	0.4	86.6	6.420
12															
13	0.3	109.0	12.549							0.2	109.0	12.549	0.2	109.0	12.549
TOTAL	1000			1000			1000			1000			1000		

No FISH AGED

730

TABLE VIII - C : COD DIV. 3M, 1995: length composition of the gillnet catches.

LENGTH GROUP	MAY = 2nd Q.	JUL. = 3rd Q.	TOTAL	LENGTH GROUP
33	1.6		1.5	33
36	3.1		2.9	36
39	222.0		208.5	39
42	254.5	20.0	240.3	42
45	128.8	20.0	122.2	45
48	108.0	140.0	109.9	48
51	31.7	60.0	33.5	51
54	39.9	40.0	39.9	54
57	41.1	120.0	45.8	57
60	68.1	180.0	74.9	60
63	67.2	120.0	70.4	63
66	9.7	120.0	16.4	66
69	10.1	120.0	16.7	69
72	3.1	40.0	5.3	72
75	5.0	20.0	5.9	75
78	4.7		4.4	78
81	1.6		1.5	81
TOTAL	1000	1000	1000	
No. SAMPLES	6	1	7	
SAMPLING WEIGHT(kg)	330	110	440	
No.F.MEASURED	261	50	311	
MEAN LENGTH(cm)	48.3	60.5	49.1	
MEAN WEIGHT (g)	1157	2175	1219	
DEPTH RANGE (m)	392/440	137	137/440	

TABLE VIII - D : COD, DIV. 3M, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the gillnet catches.

Average of the summer months										
AGE	MAY = 2nd Q.			JUL. = 3rd Q.			TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
3	29.3	39.4	0.557				27.5	39.4	0.557	3
4	695.2	43.9	0.788	201.7	49.0	1.096	665.3	44.0	0.793	4
5	210.4	58.7	1.924	480.7	60.1	2.062	226.8	58.9	1.942	5
6	55.3	65.2	2.659	273.8	68.0	2.999	68.6	65.9	2.741	6
7	9.7	76.2	4.246	43.8	70.0	3.243	11.8	74.8	4.021	7
TOTAL	1000			1000			1000			
No FISH AGED							173			

TABLE IX - A: COD DIV. 3N, 1995:
length composition of the trawl catches.

LENGTH GROUP	FEB. = TOTAL	LENGTH GROUP
24	29.4	24
27	147.1	27
30	58.8	30
33	176.5	33
36	117.6	36
39	117.6	39
42	147.1	42
45	58.8	45
48	29.4	48
51	58.8	51
54		54
57		57
60		60
63	29.4	63
66	29.4	66
TOTAL	1000	

No. SAMPLES 1
SAMPLING WEIGHT(kg) 31
No.F.MEASURED 34
MEAN LENGTH(cm) 39.1
MEAN WEIGHT (g) 617
DEPTH RANGE (m) 340/910

TABLE X - A: COD DIV. 30, 1995:
length composition of the trawl catches.

LENGTH GROUP	FEB. = TOTAL	LENGTH GROUP
30	11.0	30
33		33
36	43.9	36
39	90.6	39
42	120.1	42
45	178.7	45
48	166.6	48
51	124.9	51
54	132.6	54
57	72.5	57
60	37.6	60
63	8.2	63
66	8.2	66
69	3.8	69
72	0.7	72
75		75
78		78
81	0.7	81
TOTAL	1000	

No. SAMPLES 6
SAMPLING WEIGHT(kg) 415
No.F.MEASURED 266
MEAN LENGTH(cm) 48.9
MEAN WEIGHT (g) 1077
DEPTH RANGE (m) 269/654

TABLE IX - B : COD, DIV. 3N, 1995:
age composition (%), mean length (cm) and
mean weight (Kg) at age of the trawl catches.

AGE	FEB. = TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
3	241.2	28.9	0.205	3
4	282.4	35.9	0.399	4
5	300.0	41.1	0.602	5
6	88.2	51.0	1.157	6
7	88.2	59.0	1.949	7
TOTAL	1000			
No FISH AGED	32			

TABLE X - B : COD, DIV. 30, 1995:
age composition (%), mean length (cm) and
mean weight (Kg) at age of the trawl catches.

AGE	FEB. = TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
4	73.3	39.2	0.534	4
5	513.8	45.5	0.832	5
6	363.9	53.7	1.383	6
7	31.4	62.2	2.161	7
8	16.2	61.6	2.082	8
9	1.4	77.5	4.247	9
TOTAL	1000			
No FISH AGED	133			

TABLE XI - A: RED-FISH (*S.mentella*), DIV. 3L, 1995:
length composition of the trawl catches.

LENGTH GROUP	FEB. = TOTAL		LENGTH GROUP
	M	F	
20	4.1		20
21	8.2		21
22	45.1	8.2	22
23	28.7	45.1	23
24	49.2	45.1	24
25	49.2	57.4	25
26	73.8	73.8	26
27	49.2	82.0	27
28	28.7	69.7	28
29	20.5	28.7	29
30	20.5	24.6	30
31	4.1	16.4	31
32	4.1	20.5	32
33	4.1	16.4	33
34	8.2	12.3	34
35	4.1	20.5	35
36	8.2	8.2	36
37	12.3		37
38	12.3	4.1	38
39	4.1		39
40	4.1	4.1	40
41		4.1	41
42			42
43		4.1	43
44		4.1	44
45		4.1	45
46			46
47			47
48		4.1	48
TOTAL	442.6	557.4	
No. SAMPLES		1	
SAMPLING WEIGHT(Kg)	34	45	
No.F.MEASURED	108	136	
MEAN LENGTH(cm)	27.5	28.8	
MEAN WEIGHT (g)	319	382	
MEAN WEIGHT(M+F)		354	
DEPTH RANGE (m)		677/764	

TABLE XI - B : REDFISH *S. mentella* (males), DIVISION 3L, 1995:
age composition (%), mean length (cm) and mean weight (Kg)
at age of the trawl catches.

AGE	FEB.= TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
5	46.5	22.6	0.168	5
6	118.2	24.1	0.203	6
7	110.5	26.5	0.268	7
8	74.2	28.4	0.328	8
9	22.5	30.2	0.393	9
10	13.3	30.1	0.389	10
11	8.2	34.0	0.556	11
12				12
13				13
14	4.1	34.5	0.580	14
15	8.2	36.0	0.659	15
16	4.1	37.5	0.743	16
17	8.2	37.5	0.744	17
18	12.3	38.2	0.784	18
19				19
20	8.2	38.5	0.803	20
21	4.1	40.5	0.932	21
TOTAL	442.6			
No FISH AGED	60			

TABLE XI - C : REDFISH *S. mentella* (females), DIVISION 3L, 1995:
age composition (%), mean length (cm) and mean weight (Kg)
at age of the trawl catches.

AGE	FEB.= TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
5	26.2	23.2	0.183	5
6	78.7	24.8	0.225	6
7	138.7	26.4	0.272	7
8	159.6	27.8	0.319	8
9	30.3	30.3	0.409	9
10	18.2	31.5	0.462	10
11	17.4	33.0	0.531	11
12	22.5	33.2	0.543	12
13	8.2	34.5	0.608	13
14	12.3	35.2	0.643	14
15	8.2	35.5	0.662	15
16	8.2	36.5	0.720	16
17				17
18	4.1	38.5	0.845	18
19				19
20	8.2	42.0	1.104	20
21	12.3	46.2	1.469	21
22				22
23	4.1	41.5	1.060	23
TOTAL	557.4			
No FISH AGED	70			

TABLE XII - A. RED-FISH (*S. mentella*), DIV. 3M, 1995: length composition of the trawl catches.

LENGTH GROUP	FEB.		MAR.		APR.-2nd Q.		AUG.-3rd Q.		1st Q.		TOTAL		LENGTH GROUP
	M	F	M	F	M	F	M	F	M	F	M	F	
16		0.1										0.01	16
17													17
18											0.5	4.0	18
19		0.1	0.5	0.7	1.5	10.7			0.4	0.6	1.9	7.2	19
20				1.4	4.9	18.2				1.2	7.1	7.8	20
21	0.8		0.9	1.7	20.7	18.8		9.4		1.4	6.4	9.0	21
22	3.0	0.1	1.3	2.1	14.9	20.9	28.3	18.9	0.9	1.7	28.3	3.7	22
23	4.3	0.4	0.2	2.9	7.3	4.2	28.3	28.3	1.6	2.4	4.3	1.6	23
24	7.2	1.0	0.9	0.5	1.2	2.3	18.9	28.3	0.9	0.1	1.4	1.7	24
25	23.6	0.4	4.5	0.5	1.7	3.9	9.4		1.9	0.6	2.1	1.7	25
26	35.2	4.0	14.8	7.5	21.5	18.2	28.3	28.3	7.6	6.3	12.9	11.0	26
27	41.0	17.9	24.2	10.9	26.3	39.5	9.4	28.3	18.1	9.8	20.6	20.4	27
28	42.9	11.3	48.4	23.8	29.4	26.4	28.3	28.3	26.9	22.9	27.8	24.2	28
29	49.9	15.4	68.4	28.8	28.9	27.6	28.3	28.3	47.5	26.0	40.7	25.9	29
30	47.0	24.9	56.5	29.6	35.0	41.0	28.3	28.3	65.4	27.3	54.1	32.0	30
31	32.9	6.9	49.8	30.7	46.7	46.4	37.7	28.3	54.9	29.8	51.4	35.6	31
32	54.4	19.3	39.6	25.5	35.1	33.6	28.3	28.3	47.0	22.5	42.7	26.4	32
33	78.0	24.7	47.3	28.1	34.1	47.3	28.3	28.3	42.0	26.7	38.9	33.8	33
34	47.4	25.4	40.1	24.6	22.1	34.9	18.9	28.3	52.3	24.6	41.1	28.2	34
35	38.3	21.9	49.1	23.3	17.5	30.0	18.9	28.3	41.3	23.6	32.6	26.0	35
36	51.3	23.6	53.0	22.3	21.8	25.7	9.4	18.9	47.3	22.2	37.6	23.3	36
37	29.2	21.0	44.1	18.1	13.2	25.9	28.3	9.4	52.7	19.0	38.6	21.1	37
38	25.1	29.2	29.3	22.7	11.2	23.3	18.9	28.3	41.7	22.4	30.2	22.9	38
39	23.4	22.7	15.9	18.9	16.7	17.7	9.4	28.3	28.6	20.6	24.3	19.8	39
40	10.9	29.8	11.0	15.0	3.4	16.2	28.3	28.3	17.1	16.3	12.2	16.5	40
41	3.0	21.7	2.7	20.5	2.8	14.6	9.4	28.3	11.0	22.0	7.9	19.7	41
42		12.6	0.4	16.8	3.7	15.4		28.3	2.7	17.6	3.2	17.1	42
43		5.6	1.0	10.2		5.9		28.3	0.3	10.6	0.2	9.5	43
44		3.5	0.4	3.9	2.2	1.8		9.4	0.9	4.2	0.5	3.5	44
45	1.6	3.0		2.4		0.6			0.6	2.6	1.1	1.8	45
46				0.2		5.0				0.5	2.0	0.4	46
47		3.0		2.1						0.7	0.4	1.1	47
48			0.5						0.4	1.8	0.3		48
TOTAL	650.2	349.8	604.7	395.3	423.9	576.1	415.1	584.9	612.1	387.9	542.6	457.4	
No. SAMPLES		18		20		6		2		38		46	
SAMPLING WEIGHT(Kg)	398	251	663	562	150	270	18	34	1061	813	1229	1118	
No F. MEASURED	698	314	1379	1030	466	720	44	62	2077	1344	2587	2126	
MEAN LENGTH(cm)	32.4	35.8	33.0	33.6	30.2	31.2	29.9	31.9	32.9	33.9	32.1	32.7	
MEAN WEIGHT (g)	504	713	528	601	424	496	416	548	524	617	495	563	
MEAN WEIGHT(M+F)		577		557		466		493		560		526	
DEPTH RANGE (m)		380/805		335/851		696/981		260/475		335/851		260/981	

TABLE XII - B: REDFISH *S. mentella* (males), DIVISION 3M, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the trawl catches.

TABLE XII. - B: REDFISH <i>S. mentella</i> (males), DIVISION 3M, 1995: age composition (%), mean length (cm) and mean weight (kg) at age or the trawl catches.																		
AGE	FEB.			MAR.			APR.-2nd Q.			AUG.-3rd Q.			1st Q.			TOTAL		
	AGE	MEAN LENGTH	MEAN WEIGHT	AGE	MEAN LENGTH	MEAN WEIGHT	AGE	MEAN LENGTH	MEAN WEIGHT	AGE	MEAN LENGTH	MEAN WEIGHT	AGE	MEAN LENGTH	MEAN WEIGHT	AGE	MEAN LENGTH	MEAN WEIGHT
4	0.8	21.5	0.144	0.9	21.5	0.144	26.0	20.3	0.122	18.9	22.0	0.154	0.9	21.5	0.144	9.9	20.6	0.128
5	0.1	19.5	0.108	0.5	19.5	0.108	23.4	21.6	0.147	75.5	23.1	0.180	0.4	19.5	0.108	11.1	21.9	0.154
6	10.2	24.4	0.208	1.1	24.8	0.221	7.2	24.9	0.223	18.9	25.5	0.238	2.6	24.5	0.213	5.1	24.9	0.222
7	69.7	26.3	0.261	29.0	26.7	0.275	46.6	26.4	0.263	9.4	26.5	0.266	35.6	26.6	0.271	36.4	26.5	0.268
8	73.8	28.0	0.316	62.2	28.5	0.331	29.0	27.8	0.308	37.7	27.8	0.305	64.1	28.4	0.328	52.1	28.2	0.322
9	51.3	29.5	0.367	64.6	29.6	0.368	27.2	28.7	0.339	18.9	29.0	0.348	62.5	29.5	0.368	47.0	29.4	0.363
10	63.8	31.2	0.435	71.2	30.9	0.421	68.4	30.1	0.389	18.9	30.0	0.384	70.0	30.9	0.423	63.3	30.6	0.409
11	58.0	32.5	0.490	53.2	32.1	0.473	51.3	32.0	0.468	47.2	31.3	0.441	54.0	32.2	0.476	54.5	32.0	0.467
12	80.6	32.9	0.505	67.9	32.5	0.489	38.7	31.5	0.444	56.6	31.7	0.451	70.0	32.6	0.492	60.7	32.2	0.477
13	44.6	33.9	0.553	39.1	34.0	0.560	16.4	33.2	0.519	28.3	33.5	0.538	40.0	34.0	0.558	33.3	33.8	0.547
14	20.1	35.0	0.607	21.2	35.2	0.617	14.9	35.4	0.629	18.9	33.5	0.534	21.1	35.2	0.616	21.9	35.0	0.606
15	40.9	35.5	0.636	44.3	35.8	0.650	26.5	36.4	0.681	18.9	36.5	0.686	43.8	35.7	0.648	41.5	36.0	0.663
16	45.6	36.9	0.711	55.5	36.9	0.710	29.8	36.3	0.680	9.4	36.5	0.686	53.9	36.9	0.710	45.3	36.7	0.700
17	36.3	37.8	0.764	37.0	37.7	0.757	6.7	39.0	0.834	9.4	38.5	0.803	36.9	37.7	0.758	22.2	38.0	0.776
18	28.1	38.3	0.793	27.5	38.1	0.783	6.1	39.4	0.862	9.4	39.5	0.866	27.6	38.2	0.785	14.7	38.3	0.794
19	11.0	38.1	0.779	14.0	37.9	0.766	0.0	0.0	0.000	9.4	38.5	0.803	13.5	37.9	0.768	11.1	38.4	0.801
20	10.1	40.0	0.902	9.6	40.0	0.901	3.7	41.5	1.002	9.4	38.5	0.803	9.7	40.0	0.901	6.9	39.8	0.885
21	2.2	40.5	0.932	3.2	41.4	1.001	3.7	41.5	1.002	9.4	41.3	0.993	3.1	41.3	0.993	2.7	41.4	0.998
22	1.5	41.5	1.002	1.7	41.7	1.017	2.2	44.5	1.231	9.4	41.5	1.002	1.7	41.7	1.015	1.8	41.6	1.010
23	1.6	44.5	1.231	0.4	44.5	1.231	2.2	44.5	1.231	9.4	41.5	1.002	0.6	44.5	1.231	1.1	44.5	1.231
24				0.5	48.5	1.588							0.4	48.5	1.588	0.3	48.5	1.588

TABLE XII - C: REDFISH *S. mentella* (females), DIVISION 3M, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the trawl catches.

TABLE XII - C : REDFISH <i>S. mentella</i> (females), DIVISION 3M, 1995: age composition (3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th) at age of the main catches.																		
AGE	FEB.			MAR.			APR.-2nd Q.			AUG.-3rd Q.			1st Q.			TOTAL		
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT
4	0.3	18.5	0.094	2.7	19.4	0.108	40.2	19.5	0.109	8.4	19.5	0.108	2.3	19.4	0.107	14.4	19.4	0.108
5	0.1	22.5	0.167	6.0	21.8	0.152	32.6	21.4	0.144	84.9	21.9	0.156	5.1	21.8	0.152	17.6	21.5	0.146
6	0.9	24.1	0.205	0.2	24.5	0.216	14.4	25.2	0.235	37.7	24.8	0.224	0.4	24.3	0.211	6.5	25.0	0.232
7	9.9	27.3	0.300	23.3	26.9	0.287	46.2	26.3	0.269	56.6	26.3	0.270	21.1	26.9	0.288	32.3	26.6	0.279
8	21.1	28.1	0.327	37.3	28.0	0.325	53.4	28.0	0.325	37.7	29.3	0.370	34.6	28.0	0.325	43.2	28.2	0.333
9	19.2	29.3	0.372	38.4	29.3	0.371	51.7	29.4	0.376	9.4	29.5	0.378	35.3	29.3	0.371	37.5	29.3	0.373
10	26.9	31.2	0.452	43.5	31.0	0.444	29.9	30.7	0.428	9.4	30.5	0.418	40.8	31.1	0.445	35.5	31.0	0.441
11	18.3	31.7	0.473	28.7	31.5	0.464	36.9	31.3	0.452	18.9	32.5	0.507	27.1	31.5	0.465	28.8	31.6	0.468
12	26.1	33.6	0.563	29.9	33.5	0.555	32.6	32.5	0.508	70.8	32.2	0.493	29.3	33.5	0.556	38.1	32.9	0.528
13	20.8	34.0	0.581	23.4	33.7	0.566	64.4	33.4	0.551	51.9	34.0	0.587	23.0	33.7	0.568	35.6	33.7	0.567
14	20.8	34.9	0.633	20.0	34.6	0.619	37.1	35.2	0.649	9.4	34.5	0.607	20.1	34.7	0.621	22.9	34.8	0.627
15	26.7	36.7	0.733	22.5	36.6	0.728	30.3	35.5	0.664	18.9	36.5	0.720	23.1	36.6	0.729	24.6	36.3	0.711
16	30.5	37.7	0.799	26.0	37.5	0.787	24.8	37.3	0.769	18.9	37.5	0.781	26.7	37.6	0.789	25.3	37.5	0.783
17	23.8	38.4	0.843	18.2	38.2	0.830	15.8	38.5	0.848	28.3	38.2	0.824	19.1	38.3	0.833	18.6	38.3	0.833
18	29.7	40.1	0.962	22.8	39.9	0.950	21.6	39.2	0.900	33.0	39.9	0.944	23.9	40.0	0.952	23.0	39.8	0.942
19	22.9	40.0	0.955	16.6	40.0	0.954	18.9	40.3	0.974	28.3	39.8	0.940	17.6	40.0	0.954	18.2	40.0	0.955
20	22.5	40.8	1.014	16.1	40.9	1.021	7.5	41.0	1.024	23.6	40.9	1.015	17.2	40.9	1.019	14.2	40.9	1.017
21	18.2	43.0	1.189	11.5	42.5	1.142	13.4	43.2	1.206	37.7	42.3	1.120	12.6	42.6	1.153	14.4	42.8	1.168
22	5.8	41.2	1.036	4.3	41.2	1.038	0.6	44.5	1.309	9.4	43.5	1.222	4.6	41.2	1.038	3.3	41.5	1.065
23	2.2	38.5	0.845	1.5	38.5	0.845	3.7	40.5	0.985				1.6	38.5	0.845	0.9	38.5	0.845
24	3.0	46.5	1.495	0.2	46.5	1.495							0.7	46.5	1.495	1.3	42.4	1.147
25+				2.1	47.5	1.595							1.8	47.5	1.595	1.1	47.5	1.595

TABLE XII - D: RED-FISH (*S. mentella*), DIV. 3M, 1995: length composition of the gillnet catches.

LENGTH GROUP	MAY		JUN.		JUL. = 3rd Q.		2nd Q.		TOTAL		LENGTH GROUP
	M	F	M	F	M	F	M	F	M	F	
25	6.5			2.8			0.3	2.7	0.1	0.9	25
26			5.7	2.8			5.4	2.7	1.8	0.9	26
27	6.5		8.8	1.5			8.7	1.4	2.9	0.5	27
28	69.1	43.0	37.8	3.8		1.4	39.5	5.9	13.3	2.9	28
29	74.3		16.8	14.3	8.2	2.0	19.9	13.5	12.1	5.8	29
30	44.3	61.3	38.8	36.9	15.6	14.1	39.1	38.2	23.4	22.1	30
31	36.5	13.1	30.7	23.8	26.6	25.5	31.0	23.2	28.1	24.7	31
32	26.1	54.7	37.2	25.5	28.8	31.5	36.6	27.1	31.4	30.1	32
33		6.5	23.2	25.4	36.9	32.5	22.0	24.4	31.9	29.8	33
34	19.6		28.9	21.1	32.2	29.5	28.4	20.0	30.9	26.4	34
35	56.1	61.3	35.1	43.0	43.2	35.9	36.2	44.0	40.8	38.6	35
36	36.5	56.1	34.8	32.8	48.3	42.0	34.9	34.0	43.8	39.4	36
37	43.0	49.5	37.5	58.4	53.8	46.0	37.8	57.9	48.5	50.0	37
38	49.5	43.0	30.7	44.1	49.2	51.7	31.7	44.0	43.4	49.1	38
39	6.5		33.6	35.3	36.3	42.5	32.2	33.4	35.0	39.4	39
40	31.3	49.5	23.9	28.1	37.2	43.5	24.3	29.2	32.9	38.8	40
41	36.5	19.6	20.2	32.3	31.5	33.8	21.1	31.6	28.0	33.1	41
42			20.3	31.7	22.2	27.8	19.2	30.0	21.2	28.5	42
43			10.0	17.9	11.8	18.9	9.4	16.9	11.0	18.2	43
44			4.2	23.6	6.9	14.6	4.0	22.3	5.9	17.2	44
45			4.6	4.2	3.6	10.7	4.4	4.0	3.9	8.5	45
46			0.8	3.7		3.7	0.7	3.5	0.2	3.6	46
47				3.3				3.1		1.0	47
TOTAL	542.4	457.6	483.7	516.3	492.4	507.6	486.8	513.2	490.5	509.5	
No. SAMPLES		2		7		11		9		20	
SAMPLING WEIGHT(Kg)	24	20	225	281	402	423	249	301	650	724	
No.F. MEASURED	49	36	330	370	550	550	379	406	929	956	
MEAN LENGTH(cm)	34.0	35.1	35.3	37.1	37.0	37.7	35.2	37.0	36.4	37.5	
MEAN WEIGHT (g)	581	662	652	793	734	820	647	787	706	809	
MEAN WEIGHT(M+F)		618		725		778		719		758	
DEPTH RANGE (m)		720/900		440/650		430/496		440/900		430/900	

TABLE XII - E: REDFISH *S. mentella* (males), DIVISION 3M, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the gillnet catches.

AGE	MAY			JUN.			JUL.-3rd Q.			2nd Q.			TOTAL		
	AGE	COMP.	MEAN LENGTH	MEAN WEIGHT	AGE	COMP.	MEAN LENGTH	MEAN WEIGHT	AGE	COMP.	MEAN LENGTH	MEAN WEIGHT	AGE	COMP.	MEAN WEIGHT
5	5	0.4	25.5	0.238						0.02	25.5	0.238	5	0.01	25.5
6	6	1.6	25.5	0.238						0.1	25.5	0.238	6	0.03	25.5
7	7	9.0	27.1	0.285	9.2		28.5	0.330		9.2	27.2	0.288	7	3.1	27.2
8	8	51.1	28.7	0.336	30.8	30.8	28.5	0.332	2.2	30.0	28.5	0.332	8	12.1	28.7
9	9	61.8	29.3	0.359	27.7	27.7	29.4	0.361	7.2	30.2	29.5	0.361	9	14.6	29.6
10	10	62.3	30.2	0.394	39.1	39.1	30.9	0.423	22.9	31.6	30.9	0.421	10	31.2	30.9
11	11	34.0	31.1	0.428	38.3	38.3	32.0	0.466	34.9	32.7	31.9	0.464	11	32.4	31.9
12	12	38.4	31.5	0.448	44.4	44.4	32.3	0.482	41.1	32.7	32.3	0.480	12	32.6	32.3
13	13	24.4	34.2	0.568	27.5	27.5	33.8	0.552	30.0	34.1	33.9	0.553	13	34.0	33.9
14	14	23.6	35.2	0.619	20.2	20.2	35.0	0.606	23.3	35.2	35.0	0.606	14	35.1	35.0
15	15	50.1	36.4	0.681	41.6	41.6	36.2	0.671	54.4	36.4	36.2	0.672	15	36.3	36.2
16	16	56.2	37.0	0.716	48.8	48.8	37.0	0.716	67.7	37.0	37.0	0.716	16	37.0	37.0
17	17	32.1	38.4	0.797	33.6	33.6	38.6	0.811	45.9	38.5	38.6	0.810	17	38.6	38.6
18	18	21.0	38.6	0.814	25.5	25.5	38.9	0.830	33.7	38.8	38.9	0.829	18	38.9	38.9
19	19	18.8	38.7	0.818	19.3	19.3	38.9	0.827	26.7	38.8	38.9	0.827	19	38.8	38.8
20	20	25.1	40.4	0.931	18.9	18.9	40.3	0.920	28.2	40.3	40.3	0.921	20	40.3	40.3
21	21	14.3	41.1	0.977	19.0	19.0	42.3	1.066	25.8	42.2	42.3	1.062	21	42.2	42.2
22	22	18.2	41.5	1.002	30.4	30.4	42.2	1.051	37.9	42.1	42.1	1.045	22	42.1	42.1
23	23				4.2	4.2	44.5	1.231	6.9	44.5	44.5	1.231	23	44.5	44.5
24	24												24		
25+	25+				5.4	5.4	45.6	1.328	3.6	45.5	45.6	1.328	25+	45.6	45.6
TOTAL		542.4			483.7		492.4		486.8		490.5		490.5		

No FISH AGED

TABLE XII - F: REDFISH *S. mentella* (females), DIVISION 3M, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the gillnet catches.

AGE	MAY			JUN.			JUL.-3rd Q.			2nd Q.			TOTAL		
	AGE	COMP.	MEAN LENGTH	MEAN WEIGHT	AGE	COMP.	MEAN LENGTH	MEAN WEIGHT	AGE	COMP.	MEAN LENGTH	MEAN WEIGHT	AGE	COMP.	MEAN WEIGHT
6	6				1.3		25.5	0.244		1.2	25.5	0.244	6	0.4	25.5
7	7				4.8		26.8	0.286		4.6	26.8	0.286	7	1.6	26.9
8	8	28.3	28.9	0.356	10.2		29.2	0.369	0.1	11.2	29.2	0.367	8	5.4	29.3
9	9	24.9	29.1	0.366	16.0		30.0	0.398	2.5	30.6	29.9	0.395	9	9.6	30.2
10	10	40.0	30.8	0.430	30.9	30.9	31.1	0.445	20.9	31.7	31.1	0.444	10	24.4	31.4
11	11	31.1	31.3	0.455	25.4	25.4	31.6	0.466	21.2	32.1	31.6	0.466	11	31.9	31.9
12	12	40.2	32.8	0.522	34.9	34.9	33.1	0.536	38.6	33.2	33.0	0.536	12	33.1	33.1
13	13	33.5	34.0	0.583	36.0	36.0	34.0	0.584	40.7	33.9	34.0	0.584	13	33.9	33.9
14	14	24.7	35.5	0.663	28.9	28.9	35.4	0.659	31.6	35.2	35.4	0.659	14	35.3	35.3
15	15	50.3	36.5	0.724	40.7	40.7	36.6	0.729	45.4	36.6	36.6	0.729	15	36.6	36.6
16	16	55.5	37.2	0.763	51.7	51.7	37.5	0.787	52.2	37.6	37.5	0.785	16	37.6	37.6
17	17	33.5	37.9	0.808	39.7	39.7	38.2	0.829	42.3	38.4	38.2	0.828	17	38.3	38.3
18	18	31.7	39.2	0.895	59.7	59.7	40.6	1.001	58.7	40.3	40.5	0.997	18	40.4	40.4
19	19	28.6	39.6	0.927	38.3	38.3	40.1	0.962	44.1	40.1	40.1	0.961	19	40.1	40.1
20	20	19.9	40.5	0.987	29.4	29.4	41.2	1.039	34.3	41.0	41.2	1.037	20	41.1	41.1
21	21	6.6	41.2	1.035	50.6	50.6	43.2	1.203	52.1	43.4	43.2	1.201	21	43.3	43.3
22	22	4.4	41.0	1.022	7.4	7.4	42.0	1.103	8.4	41.9	42.0	1.101	22	41.9	41.9
23	23	2.0	38.5	0.845	2.1	2.1	38.5	0.845	2.5	38.5	38.5	0.845	23	38.5	38.5
24	24	2.3	40.5	0.985	5.0	5.0	45.0	1.364	5.7	44.4	44.8	1.355	24	44.5	44.5
25+	25+				3.3	3.3	47.5	1.595		3.1	47.5	1.595	25+	47.5	47.5
TOTAL		457.6			516.3		507.6		513.2		509.5		509.5		

No FISH AGED

382

TABLE XIII : RED-FISH (S. mentella), DIV. 3N, 1995: length composition of the trawl catches.

LENGTH GROUP	FEB.=1st Q.		MAY		JUN		JUL		AUG.		2nd Q.		3rd Q.		TOTAL		LENGTH GROUP
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
17					1.5	0.6					0.5	0.2			0.4	0.2	17
18					0.6	2.2					0.2	0.7			0.2	0.6	18
19					2.1	1.8					0.6	0.6			0.6	0.5	19
20	38.8				1.1	2.7					0.3	0.8			2.9	0.8	20
21	9.7					1.5						0.5			0.6	0.4	21
22	116.5				3.0						0.9				8.5		22
23	29.1				1.9	2.2					0.6	0.7			2.5	0.6	23
24	116.5	19.4			1.3	0.9					0.4	0.3			8.1	1.5	24
25	87.4	9.7			2.1	0.6					0.6	0.2			6.4	0.8	25
26	145.6	19.4	26.9		3.7	10.3	27.9	27.9			19.7	27.2	26.0		28.1	26.7	26
27	68.0	48.5	41.1	49.1	28.3	7.5	30.9	33.9			37.1	36.1	28.8	31.6	39.0	36.9	27
28	48.5	38.8	49.1	35.4	28.0	20.8	33.9	18.1			42.5	30.8	31.6	20.4	42.7	31.2	28
29	9.7		39.6	49.1	24.5	27.9	50.7	63.7	76.9	25.6	34.9	42.5	52.5	61.1	33.5	40.0	29
30	38.8	29.1	49.1	48.6	28.5	49.1	73.9	12.1	76.9	25.6	42.7	48.7	74.1	11.3	42.9	46.8	30
31		9.7	56.6	40.1	45.1	68.2	67.6	101.8	76.9	25.6	53.0	48.8	68.2	96.6	49.7	47.0	31
32			34.9	56.6	50.4	72.8	43.7	39.5	76.9	51.3	39.7	61.6	46.0	40.3	37.2	57.2	32
33				56.6	41.1	69.3	36.5	40.7	51.3	76.9	12.8	60.5	37.5	43.2	12.3	56.2	33
34				40.1	28.6	74.5	63.7	35.8	25.6	76.9	8.9	50.7	61.1	38.6	9.1	47.2	34
35	19.4	29.1		26.9	28.6	82.0	58.5	38.8	51.3	25.6	8.9	24.1	54.6	39.7	10.3	42.9	35
36	9.7		21.7	23.5	23.5	29.5	30.9	36.7	51.3	25.6	7.3	24.1	32.3	36.0	7.9	22.7	36
37	48.5	9.7	40.1	27.0	40.5	30.9	1.9		25.6	25.6	36.0	12.6	30.5	3.5	36.7	12.2	37
38			57.1	13.7	4.9	18.6			51.3	25.6	40.9	15.2	3.5	1.7	37.6	14.0	38
39			13.2	27.4	6.0	14.9			25.6	25.6	10.9	23.5			10.0	21.6	39
40			26.4	40.1	4.3	5.4			25.6		19.5	29.3	1.7		18.0	26.9	40
41			26.4			9.6					18.2	3.0			16.7	2.7	41
42						0.6			25.6			0.2	1.7		0.03	0.2	42
TOTAL	786.4	213.6	460.1	539.9	386.1	613.9	549.1	450.9	564.1	435.9	437.1	562.9	550.1	449.9	462.0	538.0	
No. SAMPLES		1		3		19		4		1		22		5		28	
SAMPLING WEIGHT(Kg)	33	13	14	15	182	469	25	26	12	9	196	483	38	36	267	531	
No.F. MEASURED	81	22	30	34	381	871	52	53	22	17	411	905	74	70	566	997	
MEAN LENGTH(cm)	26.5	29.4	33.0	32.5	32.3	33.4	32.1	31.7	33.8	33.6	32.8	32.8	32.2	31.9	32.1	32.7	
MEAN WEIGHT(g)	287	391	543	533	496	570	482	484	567	570	530	545	488	490	502	541	
MEAN WEIGHT(M+F)		309		538		541	483			568		539		489		523	
DEPTH RANGE (m)		340/910		324/1571		326/1620	768/894		816/926		324/1620		768/894		324/1620		

TABLE XIV - A : RED-FISH (S.mentella), DIV. 30, 1995: length composition of the trawl catches.

LENGTH GROUP	FEB.=1st Q.		JUN.=2nd Q.		JUL.		AUG.		3rd Q.		TOTAL		LENGTH GROUP
	M	F	M	F	M	F	M	F	M	F	M	F	
19						1.6						1.2	19
20		3.5			0.8	2.4			0.6			1.8	20
21	3.2	3.2			3.1	2.4			2.4			1.8	21
22	16.2	6.7			7.4	7.4			5.7			5.7	22
23	6.5				8.5	8.5			6.5			6.6	23
24	16.7				3.5	15.5			2.7			12.0	24
25	72.5	23.4			5.4	12.4			4.2			9.5	25
26	63.4	10.2			12.7	4.6			9.8			3.6	26
27	43.1	36.6			22.8	10.0			23.6			9.2	27
28	39.8	60.2	9.0		30.2	13.5	26.4	6.6	30.8			16.9	28
29	29.9	36.3	45.0		23.2	27.0	33.0	28.0	51.5			54.6	29
30	90.5	111.1	72.1		31.4	93.7	146.3	147.1	53.5			100.3	30
31	9.9	37.2	63.1		38.6	110.9	127.6	122.1	47.5			107.0	31
32	23.2	74.7	27.0		21.2	51.6	77.1	94.1	21.9			49.1	32
33	9.7	23.8	18.0		8.4	15.4	24.3	40.7	6.5			19.6	33
34	23.2	23.4	9.0		5.8	13.8	6.6	23.0	6.0			15.9	34
35	13.0	10.2	9.0			7.3	1.6	9.8	0.4			7.8	35
36	19.9	13.2	9.0	9.0		6.1			23.2			4.7	36
37	3.2	3.2	27.0	9.0	30.1	7.7	8.2	8.2	17.6			7.8	37
38	3.2		45.0	27.0	20.4	47.6	1.6		16.6			36.6	38
39	3.2	6.5	27.0	27.0	21.1	44.8	3.2	3.2	23.5			35.2	39
40	3.5	3.5	9.0	36.0	29.6	52.7			16.9			40.6	40
41		3.2	18.0	27.0	21.9	26.3	6.6	6.6	17.1			21.7	41
42	3.2	13.0	9.0	36.0	20.3	14.3		3.2	9.2			11.7	42
43			9.0	27.0	1.9	9.6	1.6	1.6	1.8			7.8	43
44				9.0		6.2						4.8	44
45						2.7						2.1	45
46						3.9		6.6				4.5	46
47							1.6		0.4			0.3	47
TOTAL	497.0	503.0	405.4	594.6	380.2	619.8	465.5	534.5	399.8	600.2	403.9	596.1	
No. SAMPLES		5		1		3		2		5		11	
SAMPLING WEIGHT(Kg)	53	83	25	38	134	248	51	81	185	329	262	450	
No.F MEASURED	95	115	45	66	235	410	107	163	342	573	482	754	
MEAN LENGTH(cm)	29.2	31.0	33.7	33.9	33.4	33.9	30.7	31.5	32.7	33.4	32.6	33.4	
MEAN WEIGHT (g)	374	459	574	622	568	620	420	474	528	590	526	589	
MEAN WEIGHT(M+F)		417		603		600		449		566		564	
DEPTH RANGE (m)		269/654		325/646		310/800		300/763		300/800		269/800	

TABLE XIV - B: RED-FISH (*S.mentella*), DIV. 30, 1995: length composition of the gillnet catches.

LENGTH GROUP	JUN.= 2nd Q.		JUL.= 3rd Q.		TOTAL		LENGTH GROUP
	M	F	M	F	M	F	
26	3.6	1.8			2.9	1.4	26
27	1.8	3.6			1.4	2.9	27
28	3.6	8.2			2.9	6.5	28
29	2.7	6.3			2.2	5.0	29
30	7.3	23.9			5.8	19.0	30
31	12.9	11.3		9.6	10.3	10.9	31
32	12.4	21.0	18.1	9.2	13.6	18.6	32
33	18.9	28.9	18.1	27.2	18.7	28.6	33
34	20.7	25.0	18.7	36.8	20.3	27.4	34
35	35.7	27.3	48.8	27.2	38.4	27.3	35
36	40.8	47.6	59.5	50.4	44.6	48.2	36
37	37.6	60.4	18.8	10.3	33.8	50.1	37
38	48.8	54.7	41.3	59.7	47.2	55.7	38
39	28.4	42.9	59.3	68.6	34.7	48.2	39
40	48.5	50.1	61.2	32.4	51.1	46.5	40
41	27.6	50.8	28.3	68.7	27.8	54.4	41
42	27.8	53.5	31.7	41.2	28.6	51.0	42
43	12.5	31.5	31.4	60.9	16.4	37.5	43
44	11.3	18.0	9.2	21.5	10.9	18.7	44
45	7.8	18.9	20.9	10.6	10.5	17.2	45
46		3.5		0.2		2.8	46
TOTAL	410.9	589.1	465.6	534.4	422.1	577.9	
No. SAMPLES		11		4		15	
SAMPLING WEIGHT(Kg)	211	308	65	87	276	396	
No.F.MEASURED	296	411	88	110	384	521	
MEAN LENGTH(cm)	37.9	38.3	38.9	39.3	38.1	38.5	
MEAN WEIGHT (g)	789	860	846	919	802	871	
MEAN WEIGHT(M+F)		831		885		842	
DEPTH RANGE (m)		408/675		320/619		320/675	

TABLE XV - A : GREENLAND HALIBUT, DIV. 3L, 1995: length composition of the trawl catches.

LENGTH GROUP	FEB.=1st Q.		JUN.=2nd Q.		JUL.		AUG.		SEP.		OCT.=4th Q.		3rd Q.		TOTAL		LENGTH GROUP
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
26									1.2	1.2			0.3	0.3	0.3	0.3	26
28	7.2	12.2	0.4	0.4			0.2	0.1	1.0	1.0			0.4	0.4	0.7	0.7	28
30	42.8	96.7	1.2	1.4	0.4	0.9	1.9	1.8	3.7	4.2			2.1	2.3	4.1	4.1	30
32	28.4	80.8	4.9	6.0	0.8	0.9	4.6	9.3	5.7	6.9			4.0	6.7	5.0	5.0	32
34	53.3	83.5	11.6	14.2	7.0	15.8	8.6	19.3	12.7	15.5			9.4	17.4	11.6	11.6	34
36	62.4	105.5	14.4	18.4	21.6	55.6	28.0	32.0	16.9	21.5			23.4	34.3	23.3	23.3	36
38	46.6	135.4	19.1	24.3	45.5	65.5	31.9	44.5	22.7	28.8			32.3	44.8	30.7	45.9	38
40	24.2	94.4	29.0	40.0	43.8	72.1	36.0	58.8	30.9	42.7			36.3	54.9	33.5	54.9	40
42	9.7	42.8	40.7	53.9	44.4	57.3	27.8	59.9	38.5	51.1			34.6	56.8	33.3	54.0	42
44	10.2	24.1	37.5	51.8	37.4	70.5	27.1	52.2	38.7	53.5			32.8	56.7	32.0	53.4	44
46		26.0	45.1	65.0	33.4	63.8	22.4	53.9	38.0	54.6			29.4	56.4	30.2	55.4	46
48	6.1	5.4	34.4	49.4	21.7	61.0	20.5	56.7	25.1	36.1			22.1	51.7	24.6	50.3	48
50			23.6	40.2	18.7	51.8	19.6	57.5	25.5	43.5			21.1	52.2	21.3	48.5	50
52			14.2	24.1	10.1	29.6	15.4	41.8	18.0	30.6			14.9	35.8	15.9	34.9	52
54	1.2	1.2	20.2	35.9	7.2	21.1	12.9	32.6	16.7	29.6			12.7	29.2	14.2	30.2	54
56			16.2	34.4	9.2	19.1	8.9	26.2	13.2	28.1			10.2	25.1	10.9	25.7	56
58			8.3	21.4	5.5	14.1	8.0	22.2	9.2	23.7			7.8	20.8	8.0	21.1	58
60			4.9	16.4	2.8	10.5	5.5	19.8	6.7	22.3			5.2	18.4	5.0	17.5	60
62			4.7	18.7	2.3	7.4	3.7	16.7	5.2	20.7			3.8	15.7	3.8	15.6	62
64			3.5	18.4	1.0	8.4	2.9	16.7	4.0	21.0			2.8	16.1	2.8	15.8	64
66			1.6	14.7	0.9	8.7	1.3	13.9	1.9	17.3			1.4	13.7	1.4	13.1	66
68			0.9	17.8	0.3	7.1	0.6	8.6	0.8	14.3			0.6	9.9	0.6	10.2	68
70			0.3	10.4	0.1	4.1	0.3	10.6	0.4	13.0			0.3	9.8	0.3	8.9	70
72			0.2	11.2	0.1	7.0	0.1	7.3	0.3	13.1			0.2	8.0	0.2	8.5	72
74			0.3	13.9	0.1	10.0	0.2	7.7	0.2	7.9			0.1	4.3	0.1	7.9	74
76				7.9		3.6		6.5		10.4				6.5		6.6	76
78				14.8		3.3		8.0		9.2				5.3		7.3	78
80				11.2		4.8		6.2		11.5				9.2		7.4	80
82				9.1		2.5		6.4		8.1				7.3		6.0	82
84				4.2		3.5		4.0		6.8				3.0		4.7	84
86				5.8		1.1		2.9		5.5				6.7		3.3	86
88				3.4		0.9		1.8		3.9				2.0		2.2	88
90				0.4		1.1		2.7		2.5				2.1		2.3	90
92				1.7		1.0		1.3		1.2				0.7		1.1	92
94				0.8		1.0		0.7		0.8				0.8		0.7	94
96				1.2		0.7		0.7		0.4				0.1		0.5	96
98						0.7				0.4				0.1		0.1	98
100										0.4				0.1		0.1	100

TOTAL	292.0	708.0	337.3	662.7	314.2	685.8	288.5	711.5	336.9	663.1	344.5	655.5	308.3	691.7	313.8	686.2	
No. SAMPLES		2		15		17		41		27		13		85		115	
SAMPLING WEIGHT(Kg)		232		2095		1960		6576		3803		1283		12339		15949	
No.F. MEASURED		503		1304		1659		4761		2022		870		8442		11119	
MEAN LENGTH(cm)	36.6	37.4	47.0	54.1	44.8	48.6	45.7	51.3	46.6	53.9	48.5	53.7	45.8	51.4	45.8	51.1	
MEAN WEIGHT (g)	393	422	942	1729	792	1183	871	1439	925	1728	1029	1608	870	1461	872	1441	
MEAN WEIGHT(M+F)		414		1463		1060		1275		1458		1409		1279		1262	
DEPTH RANGE (m)		667/764		733/1208		724/1156		648/1204		704/1076		682/1023		648/1204		648/1204	

TABLE XV - B : GREENLAND HALIBUT (males), DIVISION 3L, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the trawl catch

AGE	FEB. = 1st Q.			JUN.			JUL.			AUG.			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
3	67.6	31.9	0.238	6.2	33.4	0.277	2.8	34.9	0.322	6.7	33.6	0.283	3
4	160.3	36.6	0.380	66.4	39.4	0.490	89.9	39.7	0.495	80.0	38.9	0.466	4
5	56.4	40.6	0.542	131.2	45.0	0.761	136.5	43.9	0.697	103.6	44.0	0.708	5
6	5.1	46.5	0.834	48.3	48.6	0.970	37.6	48.1	0.942	34.1	49.0	0.998	6
7	1.7	50.9	1.130	34.9	52.6	1.276	21.3	52.1	1.231	25.7	52.8	1.287	7
8	0.7	51.8	1.206	25.5	56.3	1.592	14.0	56.3	1.592	19.2	56.6	1.623	8
9	0.1	55.0	1.450	15.0	59.9	1.959	7.6	59.4	1.905	11.2	60.3	2.003	9
10	0.1	55.0	1.450	8.4	61.7	2.190	4.2	61.4	2.135	7.0	61.6	2.169	10
11				1.3	67.2	2.859	0.4	67.3	2.877	1.0	66.9	2.813	11
TOTAL	292.0			337.3			314.2			288.5			

TABLE XV - B: Count.

AGE	SEP.			OCT. = 4th Q.			3rd QUARTER			TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
3	10.7	32.0	0.245	2.7	33.6	0.284	6.9	33.0	0.269	9.6	32.6	0.259	3
4	72.4	39.2	0.480	51.5	39.8	0.502	80.1	39.2	0.477	80.1	39.0	0.469	4
5	124.8	44.7	0.746	121.6	45.6	0.793	117.2	44.2	0.716	115.6	44.3	0.725	5
6	46.0	48.7	0.982	58.1	49.4	1.027	38.3	48.7	0.980	39.5	48.8	0.986	6
7	33.1	52.8	1.288	48.1	52.7	1.274	26.9	52.7	1.277	28.5	52.7	1.276	7
8	24.6	56.7	1.624	33.9	56.1	1.569	19.6	56.6	1.619	20.6	56.5	1.606	8
9	14.9	60.3	2.003	17.3	59.6	1.926	11.4	60.2	1.988	11.8	60.0	1.975	9
10	9.0	61.9	2.198	10.1	60.7	2.053	6.9	61.7	2.176	7.0	61.5	2.157	10
11	1.4	66.9	2.817	1.1	66.4	2.745	1.0	67.0	2.821	1.0	66.9	2.815	11
TOTAL	336.9			344.5			308.3			313.8			

No FISH AGED

318

TABLE XV - C : GREENLAND HALIBUT (females), DIVISION 3L, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the trawl cat

AGE	MAR. = 1st Q.			JUN.			JUL.			AUG.			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
3	173.2	32.3	0.248	10.1	34.0	0.294	10.4	35.7	0.345	15.0	34.2	0.299	3
4	334.7	37.3	0.408	94.3	40.6	0.546	163.8	39.9	0.508	129.3	39.9	0.510	4
5	177.6	41.4	0.569	158.9	44.5	0.731	215.9	43.8	0.691	183.0	44.1	0.710	5
6	17.3	45.3	0.777	101.3	50.7	1.126	109.2	50.0	1.074	118.1	50.7	1.125	6
7	4.9	48.3	0.946	75.4	53.7	1.389	69.6	52.2	1.257	83.1	53.3	1.350	7
8	0.3	55.0	1.450	68.6	59.6	1.960	43.8	58.6	1.863	66.3	59.0	1.895	8
9				43.7	66.3	2.809	22.5	65.3	2.667	37.5	65.0	2.632	9
10				39.9	71.6	3.634	18.1	71.2	3.544	28.7	70.5	3.450	10
11				33.5	76.6	4.506	15.4	76.2	4.450	23.6	76.5	4.533	11
12				20.5	79.8	5.221	10.3	80.6	5.447	14.7	80.2	5.327	12
13				7.4	79.3	5.083	2.7	79.6	5.172	5.7	79.9	5.237	13
14				5.2	81.2	5.379	2.2	80.9	5.312	3.8	80.8	5.304	14
15+				4.0	90.0	7.637	1.8	91.2	7.996	2.6	89.7	7.552	15+
TOTAL	708.0			662.7			685.8			711.5			

TABLE XV - C : Count.

AGE	SEP.			OCT. = 4th Q.			3rd QUARTER			TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
3	15.3	32.9	0.267	4.6	34.3	0.306	14.0	34.0	0.297	21.1	33.3	0.276	3
4	99.8	40.2	0.527	75.2	41.0	0.561	128.7	39.9	0.513	130.9	39.7	0.504	4
5	155.2	44.3	0.720	143.3	45.0	0.762	182.5	44.1	0.707	176.0	44.0	0.707	5
6	94.3	50.8	1.132	131.3	51.2	1.162	109.3	50.6	1.115	106.2	50.6	1.120	6
7	71.0	54.2	1.433	97.6	53.7	1.375	76.5	53.3	1.353	75.0	53.4	1.358	7
8	70.4	59.9	1.989	81.5	58.8	1.857	62.4	59.2	1.920	61.7	59.2	1.914	8
9	45.7	65.6	2.703	41.6	64.2	2.513	36.4	65.3	2.663	35.6	65.2	2.658	9
10	38.4	70.8	3.509	29.5	70.1	3.405	29.1	70.7	3.486	28.5	70.7	3.493	10
11	33.6	77.1	4.661	23.8	76.9	4.615	24.6	76.7	4.572	23.9	76.7	4.569	11
12	22.1	80.1	5.285	14.9	80.3	5.330	15.8	80.2	5.328	15.3	80.1	5.317	12
13	8.0	80.1	5.276	5.7	81.3	5.523	5.7	80.0	5.246	5.5	80.0	5.260	13
14	6.0	81.0	5.342	4.1	80.9	5.313	4.1	80.9	5.321	3.9	80.9	5.326	14
15+	3.2	88.2	7.127	2.4	86.4	6.607	2.6	89.4	7.470	2.5	89.2	7.401	15+
TOTAL	663.1			655.5			691.7			686.2			

No FISH AGED

495

TABLE XVI - A. GREENLAND HALIBUT, DIV. 3M, 1995: length composition of the trawl catches.

LENGTH GROUP	MAR=1st Q.		APR.		JUN.		JUL.		AUG.		SEP.		OCT=4th Q.		2nd Q.		3rd Q.		TOTAL		LENGTH GROUP
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
22					2.5	2.5									0.8	0.8			0.2	0.2	22
24																					24
26																					26
28																					28
30																					30
32	0.8	4.8			1.5	1.8	0.9	1.0							0.5	0.6	0.7	0.8	0.3	0.4	32
34	10.5	21.4	2.9	4.5	3.6	4.5	7.3	8.9					25.4	31.0	1.2	3.4	1.2	1.5	0.9	2.0	34
36	26.6	22.4	52.4	24.6	3.6	4.6	17.1	21.8	1.8				37.2	47.3	0.6	3.0	6.1	7.5	4.8	8.1	36
38	22.8	23.5	107.1	53.0	11.7	16.1	26.0	35.9	7.0	2.3	13.5	17.2	62.0	78.9	17.6	36.3	15.1	19.3	21.3	27.3	38
40	87.2	87.2	135.6	81.4	22.4	29.6	38.5	51.1		9.6	6.5	8.9	11.8	16.3	39.1	76.5	23.0	31.7	25.6	36.1	40
42	59.4	92.3	94.6	127.5	22.1	30.5	43.3	59.7	3.9	5.3	19.4	26.8			61.5	100.0	33.1	43.9	50.4	63.7	42
44	41.1	85.4	83.8	127.5	41.1	59.2	35.7	51.3	12.0	17.2	12.6	18.2	23.1	33.2	70.2	94.8	37.6	51.9	47.5	67.7	44
46	45.0	86.4	60.7	38.3	38.3	55.1	23.5	33.9	15.3	22.0	18.9	27.2			43.8	75.5	31.9	45.9	36.1	61.0	46
48	37.8	48.3	8.6	31.4	29.0	49.4	31.7	54.0	13.6	23.2	28.5	48.5	10.4	17.7	15.5	36.4	22.4	32.2	29.5	49.1	48
50	32.2	36.3	8.6	2.9	27.7	47.1	28.4	48.3	23.1	49.6	28.5	48.5			15.0	27.7	28.5	48.5	24.8	38.2	50
52	16.7	22.4	8.0	11.7	19.2	20.8	18.6	33.0	22.9	40.8	16.6	29.5	35.5	63.1	5.8	12.4	19.0	33.8	17.1	29.7	52
54	2.1	17.8	2.9	19.2	15.9	33.8	13.1	27.8	19.2	40.7	34.5	73.2	27.0	57.5	5.4	11.4	14.6	31.1	14.0	26.4	54
56	9.3	2.3			5.4	17.9	5.7	19.1	26.0	67.0	10.6	35.5	3.9	10.1	6.5	18.5	11.9	30.6	7.9	23.7	56
58	0.3	0.3	2.9		12.5	49.9	6.5	26.1	10.8	43.2	6.2	24.6	11.3	45.1	4.2	18.7	7.0	28.1	5.0	20.3	58
60	2.6	0.3			5.9	30.9	3.9	20.4	11.5	60.6	4.9	25.8	9.0	47.3	2.0	10.4	4.9	25.5	4.0	17.5	60
62					2.7	24.1	2.0	17.6	5.5	49.9	3.1	27.7	7.0	63.4	0.9	8.1	2.4	21.9	1.8	16.1	62
64					1.2	22.5	0.9	18.0	2.6	49.8	0.8	14.6	2.8	53.5	0.4	7.6	1.1	21.7	0.8	15.3	64
66					0.7	21.8	0.5	15.0	1.0	31.1	0.5	14.9			0.2	7.3	0.5	16.9	0.3	9.7	66
68					0.5	22.1	0.2	11.7	0.9	46.5	1.5	75.4	0.6	27.6	0.2	7.4	0.4	18.4	0.2	10.5	68
70					0.4	19.3	0.3	15.9	0.4	18.2					0.1	6.5	0.3	15.6	0.2	10.6	70
72						18.0		20.1		35.9						6.0	21.8	11.8	11.8	11.8	72
74						5.0		2.7		17.7						1.7	5.0	2.8	2.8	2.8	74
76								8.5		17.7							5.0	5.0	5.0	5.0	76
78								13.1		17.7							15.9	15.9	15.9	15.9	78
80								8.7		25.3							15.9	15.9	15.9	15.9	80
82								5.5		16.6							14.0	14.0	14.0	14.0	82
84								2.4		32.3							6.4	6.4	6.4	6.4	84
86								0.6		17.0							2.5	2.5	2.5	2.5	86
88								0.6		9.2											88
90								0.5		4.5											90
92								0.5													92
94								0.8													94
96																					96
TOTAL	413.2	586.8	355.3	644.7	279.4	720.6	324.2	675.8	198.1	801.9	247.8	752.2	276.8	723.2	329.7	670.3	306.0	694.0	335.6	664.4	
No. SAMPLES					5	4		10		3		1		1		9		14		32	
SAMPLING WEIGHT (kg)					398	506		1590		679		164		153		904		2432		3946	
No. F. MEASURED					521	234		872		222		65		71		755		1159		2465	
MEAN LENGTH (cm)	47.1	47.1	44.6	45.2	50.5	60.0	48.0	55.5	55.6	66.1	52.1	63.0	47.4	59.0	46.3	50.6	48.7	57.3	47.6	53.8	
MEAN WEIGHT (g)	911	911	734	734	1184	2348	1003	1852	1593	3024	1296	2729	1052	2340	863	1368	1058	2053	973	1679	
MEAN WEIGHT (M+F)					784	2023		1577		2739		2374		1984		1201		1748		1442	
DEPTH RANGE (m)					895/1262	895/1262		938/1281		938/1130		922/1076		772/1030		730/1262		922/1281		450/1281	

TABLE XVI - D: GREENLAND HALIBUT, DIV. 3M, 1995: length composition of the gillnet catches.

LENGTH GROUP	APR.		JUNE		JUL-3rd Q.		2nd Q.		TOTAL		LENGTH F GROUP
	M	F	M	F	M	F	M	F	M	F	
32	4.6	5.6					1.1	1.3	0.5	0.6	32
34	10.2	28.3					2.4	6.5	1.1	3.1	34
36	16.7	78.3					3.8	18.1	1.8	8.7	36
38	2.9	6.1					0.7	1.4	0.3	0.7	38
40	29.1	57.0	1.3	2.6	6.7	9.2	7.8	15.2	7.2	12.1	40
42	24.9	40.4	10.3	16.8	22.1	29.3	13.7	22.2	18.1	25.9	42
44	35.9	48.6	37.8	51.1	39.2	54.1	37.4	50.6	38.3	52.4	44
46	33.3	57.3	46.3	79.7	45.4	65.3	43.3	74.5	44.4	69.7	46
48	69.2	111.7	73.6	118.9	59.4	85.5	72.6	117.3	65.8	100.8	48
50	37.6	91.1	52.4	126.9	47.3	80.6	49.0	118.6	48.1	98.9	50
52	14.8	27.3	42.4	78.3	42.1	71.8	36.0	66.5	39.2	69.2	52
54	19.9	42.1	33.4	70.4	36.5	64.9	30.3	63.9	33.5	64.4	54
56	16.2	34.3	22.3	47.5	24.9	52.9	20.9	44.4	23.0	48.8	56
58	2.0	5.7	10.9	31.1	14.3	36.9	8.8	25.2	11.7	31.3	58
60	4.1	13.9	6.2	20.7	10.0	33.3	5.7	19.1	7.9	26.5	60
62	3.6	16.2	1.3	5.6	6.2	24.9	1.8	8.1	4.1	16.8	62
64	0.5	2.7	1.9	10.1	2.5	13.2	1.6	8.4	2.1	10.9	64
66					0.6	5.1			0.3	2.6	66
68					0.4	8.3			0.2	4.3	68
70	0.1	3.1			0.1	2.3	0.02	0.7	0.05	1.6	70
72	0.1	4.4			0.03	1.6	0.02	1.0	0.03	1.3	72
74					0.05	2.4			0.02	1.2	74
76						0.8				0.4	76
TOTAL	325.8	674.2	340.2	659.8	357.8	642.2	336.9	663.1	347.7	652.3	
No. SAMPLES		5		3		8		8		16	
SAMPLING WEIGHT(Kg)		174		353		1053		527		1580	
No.F.MEASURED		210		300		800		510		1310	
MEAN LENGTH(cm)	47.4	47.5	50.7	51.6	50.8	52.8	49.9	50.6	50.4	51.7	
MEAN WEIGHT (g)	940	979	1135	1207	1162	1340	1092	1154	1130	1249	
MEAN WEIGHT(M+F)		966		1183		1276		1133		1207	
DEPTH RANGE (m)		468/720		456/930		460/1080		456/930		456/1080	

TABLE XVII - A: GREENLAND HALIBUT, DIV. 3N, 1995: length composition of the trawl catches.

LENGTH GROUP	FEB=1st Q.		APR.		MAY		JUN.		JUL.		AUG.		2nd Q.		3rd Q.		TOTAL		LENGTH F GROUP	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
20	143																		0.1	
22	286	71.4									4.1	6.2			0.8	1.2	0.2	0.4	22	
24	85.7										1.0	9.3			0.2	1.9	0.1	0.7	24	
26	429	100.0									4.8	1.7			0.5	1.2	0.3	0.4	26	
28	57.1	142.9									8.0	6.3			1.8	1.5	1.0	2.9	28	
30	42.9	128.6									9.2	23.3			2.7	7.1	2.7	9.2	30	
32	42.9	14.3									0.0	5.1			8.9	16.7	9.4	20.0	32	
34	28.6		3.4	7.6	0.4	0.4	20.7	33.0	11.2	19.6	0.0	5.1			22.9	34.5	21.5	41.4	34	
36	42.9		20.0	48.6	7.6	31.0	44.8	91.1	41.9	47.7	54.2	38.1			44.2	44.4	31.8	55.8	36	
38	42.9		26.7	53.6	39.6	59.3	38.8	71.4	43.8	51.7	54.9	86.8			60.0	58.7	39.5	67.2	38	
40	14.3		24.8	83.9	31.3	40.6	45.2	94.8	40.6	81.5	62.7	130.5			68.7	45.0	39.3	75.3	40	
42			30.2	108.6	43.3	57.9	32.5	61.1	30.5	100.3	30.5	119.5			67.2	30.5	34.6	78.0	42	
44			26.6	90.9	40.6	55.3	15.0	60.7	17.5	67.8	11.3	84.1			63.3	16.3	23.6	65.6	44	
46			13.5	49.9	31.3	58.9	7.5	39.7	7.2	56.9	8.9	99.2			56.6	12.5	18.5	58.6	46	
48			8.5	49.7	25.1	61.4	4.7	37.1	6.2	45.7	0.8	7.4			48.7	5.7	14.2	50.5	48	
50			6.2	45.1	12.6	52.9	4.4	24.0	3.8	42.1	1.0	5.8			48.5	5.1	38.0	10.8	50	
52			6.1	38.3	6.9	46.9	0.7	23.6	3.8	42.9	1.5	1.5			38.4	3.2	34.8	65	52	
54			3.0	35.6	1.7	39.5	0.5	18.1	2.8	36.6	1.9	3.9			34.9	3.3	34.6	38	54	
56			0.8	22.1	0.3	27.1	0.5	7.0	2.7	7.6	0.5	3.6			29.1	2.6	30.0	1.7	56	
58			2.5	19.7	0.3	21.9	0.8	5.0	2.1	7.0	0.5	1.3			17.1	2.2	6.8	0.9	58	
60			0.7	14.3	0.03	10.8	0.1	3.7	1.0	6.6	1.0	3.7			13.8	1.8	5.9	1.1	60	
62								3.0	1.1	5.3	0.5	2.9			9.5	1.0	6.1	0.3	62	
64								2.6	0.2	6.0	2.8	2.8			6.2	0.1	5.3	0.04	64	
66								2.5	0.03	3.9	2.1	2.1			4.7	0.02	3.5	0.01	66	
68								1.4	0.4	4.0	0.5	0.5			2.9	3.3	0.03	0.01	68	
70								1.9	0.1	3.7	1.0	1.0			3.0	3.2	0.03	3.1	70	
72								1.0	0.7	2.3	2.3	2.4			1.9	2.3	2.0	2.0	72	
74								1.4	1.4	1.6	1.6	2.4			1.3	1.3	1.3	1.3	74	
76								1.1	1.1	1.7	1.7	1.0			0.9	1.6	1.1	1.1	76	
78								0.9	0.9	1.1	1.1	1.0			0.6	1.0	0.7	0.7	78	
80								0.8	0.8	1.9	1.9	1.0			0.5	1.6	0.8	0.8	80	
82								0.4	0.4	1.7	1.7	1.0			0.1	0.3	0.4	0.4	82	
84								0.02	0.02	0.8	0.8	0.8			0.01	0.6	0.2	0.2	84	
86								0.02	0.02	0.9	0.9	0.9			0.01	0.7	0.2	0.2	86	
88										0.2	0.2	0.2					0.04	0.04	88	
90																			90	
92																			92	
94																			94	
96																			96	
98																			98	
TOTAL	414.3	585.7	192.0	808.0	277.9	722.1	275.9	724.1	256.1	743.9	271.9	728.1	263.7	736.3	259.3	740.7	262.4	737.6		
No. SAMPLES	1			10		29		25		23		7		64		30		95		
SAMPLING WEIGHT(Kg)	27			2735		9676		3971		4306		829		16382		5136		21545		
No. F MEASURED	70			2381		9308		4900		4141		1140		16589		5281		21940		
MEAN LENGTH(cm)	31.9	30.6	44.2	48.6	45.1	48.0	39.6	43.3	41.4	46.8	39.2	42.6	42.4	46.0	41.0	46.0	42.0	46.0		
MEAN WEIGHT (g)	260	218	744	1120	781	1049	515	756	613	987	504	691	649	929	590	929	632	929		
MEAN WEIGHT(M+F)	236	236	1048	1048	974	974	690	690	892	892	640	640	855	841	855	841	851	841		
DEPTH RANGE (m)	340/1156		357/1600		337/1600		315/1680		601/1700		527/1555		315/1680		527/1700		315/1700		315/1700	

TABLE XVII - B: GREENLAND HALIBUT (males), DIVISION 3N, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the trawl catches.

AGE	FEB. = 1st Q.			APR.			MAY			JUN.			JUL.			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
2	42.9	24.3	0.095													2
3	181.0	29.2	0.179	1.1	35.0	0.320	0.6	32.0	0.240	27.2	33.7	0.285	14.1	34.0	0.291	3
4	153.9	35.3	0.340	65.3	39.8	0.502	70.1	41.0	0.551	144.6	37.7	0.420	122.2	38.3	0.443	4
5	35.7	40.0	0.509	79.6	44.2	0.719	132.2	45.1	0.768	81.8	42.4	0.626	83.0	42.8	0.643	5
6	1.0	41.0	0.543	36.2	49.4	1.044	64.3	48.9	0.997	18.7	47.8	0.940	26.5	49.2	1.045	6
7				9.3	54.6	1.487	10.6	50.9	1.153	3.5	52.4	1.294	8.9	56.6	1.667	7
8				0.4	57.7	1.701	0.2	57.8	1.720	0.2	59.9	1.936	1.4	61.3	2.110	8
TOTAL	414.3			192.0			277.9			275.9			256.1			

TABLE XVII - B: Count.

AGE	AUG.			2nd QUARTER			3rd QUARTER			TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
2	5.1	23.4	0.083				1.0	23.4	0.083	0.3	23.4	0.084	2
3	20.9	30.3	0.204	12.9	33.7	0.285	15.5	33.0	0.268	13.7	33.4	0.279	3
4	143.4	38.4	0.446	103.4	38.8	0.463	126.5	38.4	0.444	110.2	38.6	0.456	4
5	83.9	41.6	0.577	100.9	44.0	0.710	83.2	42.5	0.630	95.7	43.6	0.689	5
6	14.5	46.6	0.878	39.0	48.7	0.991	24.1	48.9	1.025	34.7	48.8	0.998	6
7	3.5	56.2	1.652	7.1	52.0	1.252	7.8	56.5	1.666	7.3	53.4	1.381	7
8	0.7	61.5	2.119	0.2	58.5	1.795	1.3	61.3	2.111	0.5	60.5	2.014	8
TOTAL	271.9			263.7			259.3			262.4			

No FISH AGED

222

TABLE XVII - C: GREENLAND HALIBUT (females), DIVISION 3N, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the trawl catches.

AGE	FEB. = 1st Q.			APR.			MAY			JUN.			JUL.			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
2	47.6	25.0	0.104							0.2	25.0	0.104				2
3	423.2	30.0	0.195	9.4	36.8	0.379	35.7	32.5	0.254	61.3	33.7	0.289	29.6	34.2	0.300	3
4	79.1	33.1	0.273	128.1	40.4	0.528	112.0	39.1	0.480	213.3	38.1	0.436	145.8	39.2	0.480	4
5	32.4	38.7	0.489	339.7	44.3	0.724	253.9	44.9	0.761	284.8	42.9	0.660	308.4	44.1	0.717	5
6	3.4	47.0	0.857	173.3	51.4	1.191	184.3	52.1	1.238	107.6	50.9	1.147	159.5	51.4	1.183	6
7				66.0	58.1	1.794	71.8	57.5	1.731	28.1	55.8	1.572	44.6	56.1	1.604	7
8				43.7	63.3	2.399	37.8	61.2	2.122	13.8	61.2	2.153	25.3	61.5	2.189	8
9				23.8	66.1	2.774	18.0	63.4	2.389	6.6	65.3	2.676	12.2	66.4	2.848	9
10				14.8	70.1	3.381	7.3	65.5	2.704	4.7	69.6	3.348	8.7	68.9	3.255	10
11				4.5	76.3	4.389	0.7	74.1	3.977	1.7	78.9	4.931	4.1	81.3	5.474	11
12				4.4	77.3	4.577	0.6	74.0	3.943	1.6	79.0	4.912	4.7	82.9	5.847	12
13				0.1	85.0	6.222	0.004	85.0	6.222				0.4	85.0	6.222	13
14				0.1	83.0	5.746	0.01	83.0	5.746	0.1	83.0	5.746	0.2	83.0	5.746	14
15+				0.2	81.5	5.415	0.1	94.1	8.971	0.2	81.8	5.471	0.3	82.1	5.549	15+
TOTAL	585.7			808.0			722.1			724.1			743.9			

TABLE XVII - C: Count.

AGE	AUG.			2nd QUARTER			3rd QUARTER			TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
2	14.0	23.7	0.087	0.1	25.0	0.104	2.8	23.7	0.087	0.9	23.8	0.089	2
3	43.6	31.5	0.235	43.3	33.4	0.281	32.4	33.5	0.282	40.3	33.4	0.281	3
4	184.7	39.7	0.501	160.9	38.7	0.459	153.6	39.3	0.485	158.7	38.8	0.467	4
5	378.7	43.5	0.675	281.4	43.9	0.707	322.5	44.0	0.708	293.3	43.9	0.707	5
6	76.8	47.5	0.911	147.5	51.6	1.199	142.9	50.9	1.154	146.1	51.4	1.186	6
7	14.2	55.9	1.611	50.9	57.2	1.703	38.5	56.1	1.605	47.3	56.9	1.680	7
8	7.2	65.0	2.604	27.7	61.7	2.197	21.7	61.7	2.216	26.0	61.7	2.202	8
9	4.1	67.6	2.976	13.7	64.5	2.556	10.6	66.5	2.858	12.8	65.0	2.629	9
10	2.9	71.4	3.570	7.3	68.2	3.109	7.5	69.1	3.279	7.4	68.5	3.160	10
11	0.7	76.1	4.325	1.7	77.1	4.558	3.4	81.0	5.426	2.2	78.8	4.943	11
12	1.2	78.2	4.745	1.6	77.6	4.643	4.0	82.6	5.784	2.3	80.1	5.216	12
13				0.02	85.0	6.222	0.3	85.0	6.222	0.1	85.0	6.222	13
14				0.05	83.0	5.746	0.2	83.0	5.746	0.1	83.0	5.746	14
15+	0.1	81.0	5.295	0.2	83.4	5.947	0.3	82.0	5.526	0.2	82.8	5.756	15+
TOTAL	728.1			736.3			740.7			737.6			

No FISH AGED

448

TABLE XVIII : GREENLAND HALIBUT, DIV. 30, 1995: length composition of the gillnet catches.

LENGTH GROUP	MAY		JUNE		JUL=3rd Q.		2nd Q.		TOTAL		LENGTH GROUP
	M	F	M	F	M	F	M	F	M	F	
32			3.3	7.3			3.1	6.9	2.9	6.5	32
34	12.9	27.1	0.5	1.0	8.0	12.0	1.2	2.6	1.6	3.1	34
36	36.8	83.2	14.0	31.7	44.3	45.7	15.4	34.8	17.1	35.4	36
38	95.8	184.2	22.0	42.3	52.7	67.3	26.6	51.0	28.1	52.0	38
40	77.0	143.0	25.3	47.0	62.8	127.2	28.5	52.9	30.4	57.2	40
42	56.1	103.9	34.8	64.3	43.0	147.0	36.1	66.8	36.5	71.4	42
44	38.6	91.4	24.8	58.9	27.9	122.1	25.7	60.9	25.8	64.4	44
46	8.1	21.9	35.0	94.8	16.5	83.5	33.4	90.3	32.4	89.9	46
48	2.7	7.3	28.1	77.6	7.6	72.4	26.5	73.3	25.5	73.2	48
50	2.1	7.9	20.5	75.1	4.7	35.3	19.3	71.0	18.5	68.9	50
52			10.1	49.7	0.8	9.2	9.5	46.6	9.0	44.4	52
54			7.7	68.3	0.9	9.1	7.3	64.1	6.9	60.9	54
56			2.8	59.8			2.6	56.1	2.4	52.9	56
58			0.6	22.8			0.6	21.4	0.5	20.2	58
60			1.6	26.2			1.5	24.6	1.4	23.2	60
62			0.1	17.6			0.1	16.5	0.1	15.6	62
64			0.2	10.4			0.2	9.8	0.1	9.2	64
66											66
68				9.2				8.7		8.2	68
70											70
72											72
74				4.6				4.3		4.1	74
TOTAL	330.1	669.9	231.4	768.6	269.2	730.8	237.5	762.5	239.3	760.7	
No. SAMPLES		1		12		1		13		14	
SAMPLING WEIGHT(Kg)		60		824		73		884		957	
No.F. MEASURED		100		826		100		926		1026	
MEAN LENGTH(cm)	40.8	41.0	45.3	49.5	41.4	43.8	45.0	49.0	44.7	48.7	
MEAN WEIGHT (g)	546	555	801	1114	577	702	779	1084	766	1063	
MEAN WEIGHT(M+F)		552		1042		668		1012		992	
DEPTH RANGE (m)		290/540		280/710		336/550		280/710		280/710	

TABLE XIX - A: AMERICAN PLAICE, DIV. 3M, 1995: length composition of the trawl catches.

LENGTH GROUP	AUG.		SEP.		3rd Q. = TOTAL		LENGTH GROUP
	M	F	M	F	M	F	
32			25.0	25.0	14.1	14.1	32
34			25.0	25.0	14.1	14.1	34
36			100.0	50.0	56.3	28.2	36
38							38
40		32.3		50.0		42.3	40
42		32.3	25.0	25.0	14.1	28.2	42
44		96.8	50.0	25.0	28.2	56.3	44
46		129.0	25.0	25.0	14.1	70.4	46
48		161.3	100.0	25.0	56.3	84.5	48
50		193.5	75.0	75.0	42.3	126.8	50
52		193.5	75.0	50.0	42.3	112.7	52
54		96.8	50.0		28.2	42.3	54
56			25.0	50.0	14.1	28.2	56
58		32.3				14.1	58
60							60
62		32.3				14.1	62
TOTAL	0.0	1000.0	575.0	425.0	323.9	676.1	
No. SAMPLES		1		1		2	
SAMPLING WEIGHT(Kg)		46	29	18	29	64	
No.F.MEASURED		31	23	17	23	48	
MEAN LENGTH(cm)		50.4	46.6	45.9	46.6	48.8	
MEAN WEIGHT (g)		1410	1140	1102	1140	1301	
MEAN WEIGHT(M+F)				1124		1249	
DEPTH RANGE (m)		260/475		152/200		152/475	

TABLE XIX - B :AMERICAN PLAICE(males), DIVISION 3M, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the trawl catches.

AGE	AUG.			SEP.			3rd Q. = TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
4				14.6	33.4	0.346	8.2	33.4	0.346	4
5				77.5	36.0	0.446	43.7	36.0	0.446	5
6				52.0	39.1	0.605	29.3	39.1	0.605	6
7				45.0	40.7	0.690	25.4	40.7	0.690	7
8				31.6	45.8	1.004	17.8	45.8	1.004	8
9				20.8	44.6	0.907	11.7	44.6	0.907	9
10+				333.3	51.8	1.507	187.8	51.8	1.507	10+
TOTAL	0			575			324			
No FISH AGED (based on 95 EC survey)							368			

TABLE XIX - C :AMERICAN PLAICE(females), DIVISION 3M, 1995: age composition (%), mean length (cm) and mean weight (Kg) at age of the trawl catches.

AGE	AUG.			SEP.			3rd Q. = TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
4				30.5	33.8	0.360	17.2	33.8	0.360	4
5	12.9	41.2	0.693	81.9	37.4	0.509	51.7	37.8	0.529	5
6	33.8	43.3	0.826	34.2	41.0	0.696	34.0	42.0	0.752	6
7	72.8	44.9	0.939	37.0	43.1	0.814	52.6	44.2	0.889	7
8	131.6	47.1	1.092	31.3	46.6	1.064	75.1	47.0	1.085	8
9	241.0	49.1	1.259	56.9	49.1	1.267	137.3	49.1	1.261	9
10	28.0	50.5	1.382	7.5	50.8	1.412	16.4	50.6	1.389	10
11	77.9	51.5	1.479	21.1	51.4	1.459	45.9	51.5	1.474	11
12	112.9	51.8	1.499	30.6	51.4	1.464	66.5	51.7	1.490	12
13	97.4	53.1	1.633	20.5	52.1	1.526	54.1	52.9	1.610	13
14	47.5	53.5	1.671	31.2	56.0	1.952	38.3	54.6	1.800	14
15	72.6	52.9	1.608	28.0	54.3	1.786	47.5	53.3	1.660	15
16+	71.7	60.2	2.498	14.4	56.5	2.003	39.4	59.4	2.396	16+
TOTAL	1000			425			676			
No FISH AGED (based on 95 EC survey)							403			

TABLE XIX - D: AMERICAN PLAICE, DIV. 3M, 1995:
length composition of the gillnet catches.

LENGTH GROUP	JUL. = TOTAL		LENGTH GROUP
	M	F	
26	16.4		26
28	46.0		28
30	78.1	2.8	30
32	105.2	21.6	32
34	81.2	24.4	34
36	56.8	24.4	36
38	43.2	46.0	38
40	29.6	54.0	40
42		94.4	42
44		70.4	44
46		46.0	46
48		54.0	48
50		56.8	50
52		35.2	52
54		13.6	54

TOTAL 456.5 543.5

No. SAMPLES 2
SAMPLING WEIGHT(Kg) 37 95
No. F. MEASURED 85 105
MEAN LENGTH(cm) 34.0 44.4
MEAN WEIGHT (g) 381 945
MEAN WEIGHT(M+F) 687
DEPTH RANGE (m) 136/137

TABLE XIX - E :AMERICAN PLAICE(males), DIVISION 3M, 1995:
age composition (%), mean length (cm) and mean weight (Kg)
at age of the gillnet catches.

AGE	JUL. = TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
3	32.7	28.3	0.200	3
4	151.5	31.5	0.285	4
5	154.2	34.7	0.397	5
6	60.9	37.2	0.503	6
7	38.9	37.9	0.536	7
8	15.5	39.9	0.625	8
9	2.8	39.8	0.620	9

TOTAL 456

No FISH AGED 368
(based on 95 EC survey)

TABLE XIX - F :AMERICAN PLAICE(females), DIVISION 3M, 1995:
age composition (%), mean length (cm) and mean weight (Kg)
at age of the gillnet catches.

AGE	JUL. = TOTAL			AGE
	AGE COMP.	MEAN LENGTH	MEAN WEIGHT	
4	29.0	33.5	0.348	4
5	94.9	38.2	0.549	5
6	71.2	42.0	0.748	6
7	92.4	43.2	0.820	7
8	66.2	46.1	1.023	8
9	90.6	48.0	1.169	9
10	8.0	50.1	1.345	10
11	19.4	51.0	1.428	11
12	28.0	51.3	1.455	12
13	19.2	52.7	1.590	13
14	8.8	52.8	1.607	14
15	14.7	52.4	1.560	15
16+	1.3	53.0	1.615	16+

TOTAL 544

No FISH AGED 403
(based on 95 EC survey)

TABLE XX : AMERICAN PLAICE, DIV. 3N, 1995: length composition of the trawl catches.

LENGTH GROUP	FEB. = 1st Q.		APR.		MAY		2nd Q.		TOTAL		LENGTH GROUP
	M	F	M	F	M	F	M	F	M	F	
28	3.8	23.7							1.1	7.2	28
30	90.2	69.4	32.5	16.3		60.6	5.2	53.5	30.9	58.3	30
32	76.3	125.6		46.0		151.5		134.6	23.1	131.9	32
34	42.1	148.6	36.1	78.5		151.5	5.8	139.8	16.8	142.5	34
36	31.8	145.3	78.5	65.8		151.5	12.6	137.7	18.4	140.0	36
38	19.7	102.2	55.9	39.6		151.5	9.0	133.5	12.2	124.0	38
40	5.6	50.5	26.2	69.4		60.6	4.2	62.0	4.6	58.5	40
42	6.6	42.7	32.5	55.9		90.9	5.2	85.3	5.6	72.4	42
44	1.4	14.5	19.8	72.1		60.6	3.2	62.5	2.6	48.0	44
46				62.2		60.6		60.9		42.5	46
48				39.6		30.3		31.8		22.2	48
50				68.6				11.0		7.7	50
52				19.8				3.2		2.2	52
54				42.4				6.8		4.8	54
56						30.3		25.4		17.7	56
58				9.9				1.6		1.1	58
60											60
62				16.3				2.6		1.8	62
64											64
66				16.3				2.6		1.8	66
TOTAL	277.5	722.5	281.4	718.6	0.0	1000.0	45.2	954.8	115.4	884.6	
No. SAMPLES		2		2		1		3		5	
SAMPLING WEIGHT(Kg)	41	132	13	61		18	13	78	54	211	
No.F.MEASURED	124	329	22	61		33	22	94	146	423	
MEAN LENGTH(cm)	33.9	36.1	38.1	44.1		38.9	38.1	39.5	35.1	38.7	
MEAN WEIGHT (g)	386	469	549	925		608	549	647	431	603	
MEAN WEIGHT(M+F)		446		819				642		583	
DEPTH RANGE (m)		340/1156		404/1600		362/1571		362/1600		340/1600	

TABLE XXI - A : AMERICAN PLAICE, DIV. 3O, 1995: length composition of the trawl catches.

LENGTH GROUP	FEB. = TOTAL		LENGTH GROUP
	M	F	
20	27.1		20
22			22
24			24
26	54.3	135.7	26
28		81.4	28
30	81.4	81.4	30
32	27.1	81.4	32
34	182.8	20.0	34
36	20.0		36
38	20.0		38
40	20.0	40.0	40
42	20.0	47.2	42
44			44
46		20.0	46
48		20.0	48
50	20.0		50
TOTAL	472.9	527.1	
No. SAMPLES		2	
SAMPLING WEIGHT(Kg)	12	15	
No.F.MEASURED	19	21	
MEAN LENGTH(cm)	34.0	33.2	
MEAN WEIGHT (g)	416	399	
MEAN WEIGHT(M+F)		407	
DEPTH RANGE (m)		456/654	

TABLE XXI - B : AMERICAN PLAICE, DIV. 3O, 1995: length composition of the gillnet catches.

LENGTH GROUP	JUNE = TOTAL		LENGTH GROUP
	M	F	
22	2.0		22
24	2.6		24
26	7.9	9.9	26
28	13.9	13.2	28
30	17.6	32.5	30
32	52.6	101.6	32
34	19.0	44.1	34
36	10.7	32.6	36
38	11.0	56.3	38
40	6.7	58.0	40
42	15.5	79.0	42
44	18.3	78.1	44
46		64.5	46
48		84.0	48
50		79.1	50
52		45.0	52
54		44.4	54
TOTAL	177.8	822.2	
No. SAMPLES		5	
SAMPLING WEIGHT(Kg)		165	
No.F.MEASURED		338	
MEAN LENGTH(cm)	35.2	42.9	
MEAN WEIGHT (g)	453	835	
MEAN WEIGHT(M+F)		767	
DEPTH RANGE (m)		155/360	

TABLE XXII : ROUGHHEAD GRENADIER, DIV. 3L, 1995: length composition of the trawl catches.

LENGTH GROUP	JUN.=2nd Q.		JUL.		AUG.		SEP.		OCT.=4th Q.		3rd Q.		TOTAL		LENGTH GROUP
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
10	1.3	3.9	26.0	19.4	11.5	8.5	7.1	12.3	15.3	13.5	13.3	11.6	12.2	11.0	10
11	5.7	8.6	15.4	22.5	15.2	25.0	11.0	17.2	33.1	14.6	14.2	22.5	15.9	19.8	11
12	9.0	11.9	38.5	34.9	27.6	49.2	11.2	16.6	33.7	22.7	25.6	38.1	24.9	32.9	12
13	25.2	35.6	59.2	52.3	46.8	68.7	24.4	38.8	48.9	56.9	43.6	57.9	42.3	55.2	13
14	36.1	37.3	51.9	67.7	51.4	75.9	34.3	37.7	60.1	63.5	47.2	64.6	47.8	61.4	14
15	40.6	73.5	70.2	86.9	52.7	68.2	50.3	59.5	77.1	80.7	55.6	69.7	57.0	71.7	15
16	69.6	90.1	78.1	88.9	47.8	72.4	50.7	63.1	54.3	69.7	54.6	73.3	56.2	74.7	16
17	74.3	94.6	36.7	69.2	39.0	62.3	50.1	62.2	63.1	56.7	41.3	63.6	48.2	66.2	17
18	42.9	68.3	25.9	43.1	25.5	57.2	51.3	40.8	38.1	32.0	32.1	50.2	34.2	49.7	18
19	14.2	22.2	12.9	20.4	16.2	31.2	30.4	31.0	12.6	18.9	19.1	29.0	17.6	26.7	19
20	18.8	27.0	9.2	11.4	12.3	26.7	22.7	26.4	20.4	18.9	14.3	23.6	15.7	23.3	20
21	10.1	21.3	0.7	12.0	6.8	14.5	9.6	21.0	9.6	6.5	6.3	15.7	7.2	15.0	21
22	10.7	19.5	1.9	12.4	4.3	9.8	15.5	18.7	5.5	6.4	6.6	12.6	6.9	12.5	22
23	9.5	18.1	1.6	5.1	5.8	10.1	15.2	15.0	7.3	12.1	7.3	10.3	7.6	11.5	23
24	5.9	17.0	1.1	3.3	6.4	10.7	20.4	20.5	0.3	2.0	8.9	11.7	7.3	10.9	24
25	10.9	19.5	1.5	4.6	4.0	10.6	18.4	23.3	4.7	13.0	7.2	12.6	7.2	13.4	25
26	3.9	12.4	0.8	3.1	2.6	6.2	11.3	12.5	4.6	2.4	4.4	7.1	4.4	7.1	26
27	2.0	8.9		3.1	1.4	4.0	4.2	7.4	1.1	2.4	1.9	4.7	1.8	4.9	27
28		1.8		4.0	0.9	1.9	4.3	3.5		3.0	1.6	2.7	1.2	2.7	28
29	3.1	4.9		0.8	1.5	1.5	4.6	4.6		1.1	2.0	2.1	1.8	2.3	29
30	1.2	7.1	1.5	0.5	1.0	2.0	4.3	5.8		7.5	1.9	2.7	1.6	3.9	30
31		0.4		0.1	0.2	1.4	2.2	4.9		3.0	0.6	2.0	0.5	2.0	31
32		0.7			0.4	0.4		0.7		2.7	0.2	0.4	0.2	0.8	32
33		0.7		1.4	0.2	0.1		2.7			0.1	1.0	0.1	0.8	33
34				0.1	0.2			0.7				0.2	0.1	0.2	34
35						0.2						0.1		0.1	35
TOTAL															
		395.1	604.9	432.9	567.1	381.4	618.6	453.2	546.8	489.8	510.2	409.9	590.1	419.6	580.4
No. SAMPLES			15		16		40		26		12		82		109
SAMPLING WEIGHT(Kg)		320	538	323	579	1204	2052	899	1119	297	2425	3750	3042	4647	
No.F.MEASURED		415	601	626	917	1820	2994	905	1079	474	3351	4990	4240	6070	
MEAN LENGTH(cm)		17.7	18.4	15.3	16.3	16.3	16.8	18.6	18.5	16.0	16.7	17.1	16.7	17.2	
MEAN WEIGHT (g)		578	663	381	471	472	516	694	705	438	515	551	509	563	
MEAN WEIGHT(M+F)			629		432		499		700			536		540	
DEPTH RANGE (m)			849/1208		724/1156		648/1204		704/1076		682/1023		648/1204		648/1204

TABLE XXIII -B: ROUGHHEAD GRENADIER, DIVISION 3M, 1995:
length composition of the gillnet catches.

LENGTH GROUP	MAY = TOTAL		LENGTH GROUP
	M	F	
14	1.5	1.0	14
15			15
16	1.2	1.3	16
17	20.1	9.3	17
18	9.4	15.8	18
19	99.5	32.2	19
20	39.7	52.6	20
21		173.7	21
22	44.7	46.7	22
23	115.8	35.2	23
24	55.8	55.8	24
25	23.4	21.1	25
26	27.0	56.9	26
27	38.2	13.0	27
28	2.1	7.1	28
TOTAL	478.4	521.6	
No. SAMPLES		3	
SAMPLING WEIGHT(Kg)		148	
No.F.MEASURED		168	
MEAN LENGTH(cm)	22.7	22.6	
MEAN WEIGHT (g)	1102	1083	
MEAN WEIGHT(M+F)		1092	
DEPTH RANGE (m)		486/900	

TABLE XXIV: ROUGHHEAD GRENADE, DIV. 3N, 1995: length composition of the trawl catches.

LENGTH GROUP	APR.		MAY		JUN.		JUL.		AUG.		2nd Q.		3rd Q.		TOTAL		LENGTH- GROUP	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
10	1.0	13.2	5.3	2.5	7.3	8.0	4.5	10.1	5.7	11.6	5.2	6.3	4.7	10.3	5.1	7.0	10	
11	10.4	40.8	27.5	22.3	12.3	24.6	14.8	22.6	21.0	13.3	19.3	26.3	15.5	21.6	18.7	25.5	11	
12	30.7	62.2	43.9	50.7	31.0	41.1	22.6	26.0	38.2	28.9	37.2	49.4	24.3	26.3	34.9	45.3	12	
13	46.1	63.0	46.8	52.0	38.3	59.9	22.1	29.9	34.9	39.8	43.7	56.6	23.5	31.0	40.2	52.1	13	
14	50.6	77.9	51.9	62.8	55.9	70.7	43.6	46.5	12.6	22.8	53.0	68.1	40.2	43.8	50.8	63.9	14	
15	53.3	85.1	43.1	67.4	51.1	85.4	40.5	76.3	17.7	37.0	47.6	76.6	38.0	71.9	45.9	75.8	15	
16	50.9	78.1	33.3	69.5	32.8	80.8	52.4	93.2	42.1	110.7	36.2	74.9	51.2	95.1	38.8	78.4	16	
17	37.8	64.5	21.0	73.6	16.0	84.1	36.6	90.8	58.6	92.7	22.2	75.6	39.0	91.0	25.1	78.3	17	
18	25.2	46.8	12.7	78.7	11.9	96.2	23.1	120.0	36.9	99.8	14.6	79.2	24.7	117.7	16.3	85.9	18	
19	13.9	36.9	3.8	53.8	4.6	58.5	12.7	59.1	35.2	93.7	5.8	52.5	15.2	62.9	7.4	54.3	19	
20	1.6	28.9	2.1	39.8	1.0	39.1	8.4	32.1	14.0	46.1	1.6	37.7	9.0	33.6	2.9	37.0	20	
21	0.6	18.6	0.3	32.2	0.1	26.3	2.0	36.4	4.0	33.0	0.2	28.0	2.2	36.0	0.6	29.4	21	
22		16.5	0.1	29.2		17.5	2.8	18.8		14.7	0.1	23.0	2.5	18.3	0.5	22.2	22	
23		14.4		26.0		10.6	1.4	10.9		4.8		18.7	1.2	10.2	0.2	17.2	23	
24		8.7		18.4		8.0	1.9	6.5		4.0		13.1	1.7	6.2	0.3	11.9	24	
25		5.9		9.9		10.2	3.0	3.5		2.4		9.3	2.7	3.3	0.5	8.3	25	
26		6.7		7.5		4.3	0.6	2.5		3.7		6.3	0.5	2.7	0.1	5.6	26	
27		2.9		4.4		5.0		3.2		4.3		4.3		3.3		4.2	27	
28		3.8		3.6		3.1	1.1	3.9		3.5		3.5	1.0	3.9	0.2	3.5	28	
29		2.0		2.2		2.6		2.1		3.5		2.3		2.2		2.3	29	
30				1.0		1.1		3.2		3.4		0.8		3.2		1.3	30	
31				0.3		0.3		3.3		1.9		0.3		3.2		0.8	31	
32				0.3		0.4		1.3		1.9		0.3		1.4		0.5	32	
33				0.1		0.1		1.5		0.6		0.1		1.4		0.3	33	
34								1.9		1.0		1.9		1.8		0.3	34	
35				0.1				0.6				0.03		0.5		0.1	35	
TOTAL	322.1	677.9	291.6	708.4	262.1	737.9	294.0	706.0	320.8	679.2	286.7	713.3	297.0	703.0	288.5	711.5		
No. SAMPLES		10		29		24		23		7		63		30		93		
SAMPLING WEIGHT(Kg)		733		3312		1974		1773		657		6019		2429		8448		
No.F. MEASURED	292	778	727	5297	413	3094	964	2586	421	869	4033	9880	1385	3455	2098	5418	13335	
MEAN LENGTH(cm)	15.5	16.5	14.6	17.7	14.8	17.2	16.0	17.7	16.1	17.9	14.8	17.3	16.1	17.8	15.0	17.4		
MEAN WEIGHT (g)	375	491	319	592	330	541	432	593	433	601	333	557	432	594	351	564		
MEAN WEIGHT(M+F)		454		512		486		546		547		493		546		502		
DEPTH RANGE (m)	357/1600		301/1700		320/1680		601/1600		527/1555		301/1700		527/1600		301/1700		301/1700	

TABLE XXV : ROUGHHEAD GRENADIER, DIV. 30, 1995:
length composition of the gillnet catches.

LENGTH GROUP	JUL. = TOTAL		LENGTH GROUP
	M	F	
16	15.6	28.9	16
17	35.0	81.5	17
18	13.8	65.7	18
19	28.0	116.1	19
20	26.8	99.8	20
21	6.4	102.7	21
22	15.1	111.5	22
23	11.8	100.0	23
24	14.4	52.3	24
25	15.6	19.4	25
26	5.1	27.2	26
27		7.4	27
TOTAL	187.4	812.6	
No. SAMPLES		3	
SAMPLING WEIGHT(Kg)		62	
No.F.MEASURED		76	
MEAN LENGTH(cm)	20.6	21.2	
MEAN WEIGHT (g)	850	906	
MEAN WEIGHT(M+F)		896	
DEPTH RANGE (m)		453/619	

TABLE XXVI : WITCH FLOUNDER, DIV. 30, 1995:
length composition of the gillnet catches.

LENGTH GROUP	JUNE = TOTAL		LENGTH GROUP
28	10.9		28
30	54.4		30
32	45.3		32
34	37.8		34
36	86.4		36
38	188.8		38
40	143.9		40
42	65.6		42
44	77.3		44
46	84.3		46
48	70.1		48
50	43.3		50
52	62.2		52
54	19.8		54
56	1.7		56
58	8.2		58
TOTAL	1000		
No. SAMPLES		4	
SAMPLING WEIGHT(Kg)		138	
No.F.MEASURED		231	
MEAN LENGTH(cm)		42.2	
MEAN WEIGHT (g)		575	
DEPTH RANGE (m)		156/360	

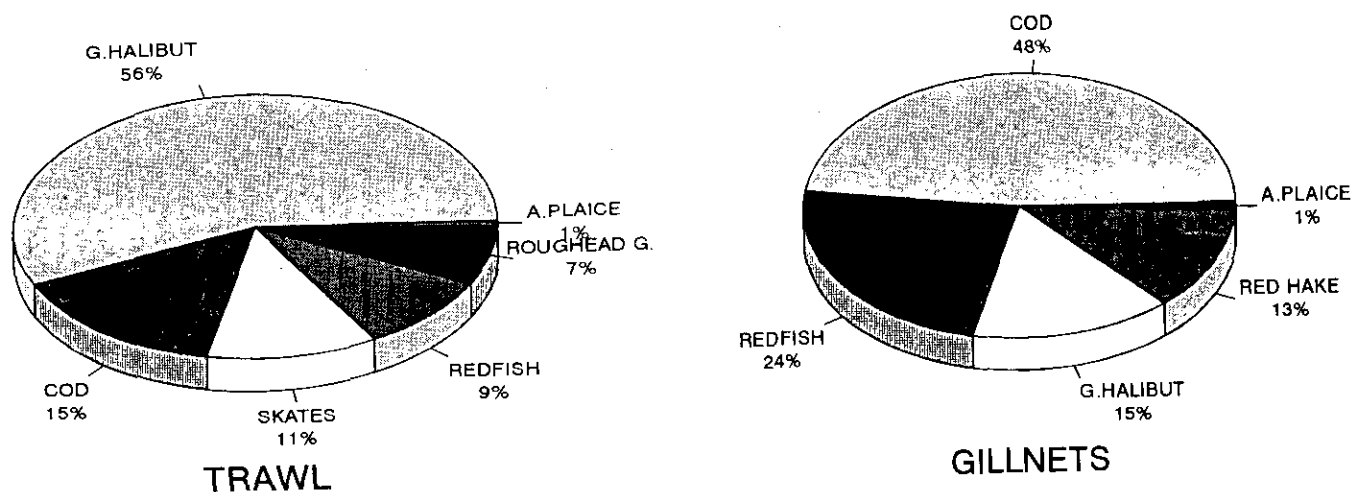


Fig.1: Breakdown of the 1995 Portuguese directed effort by species

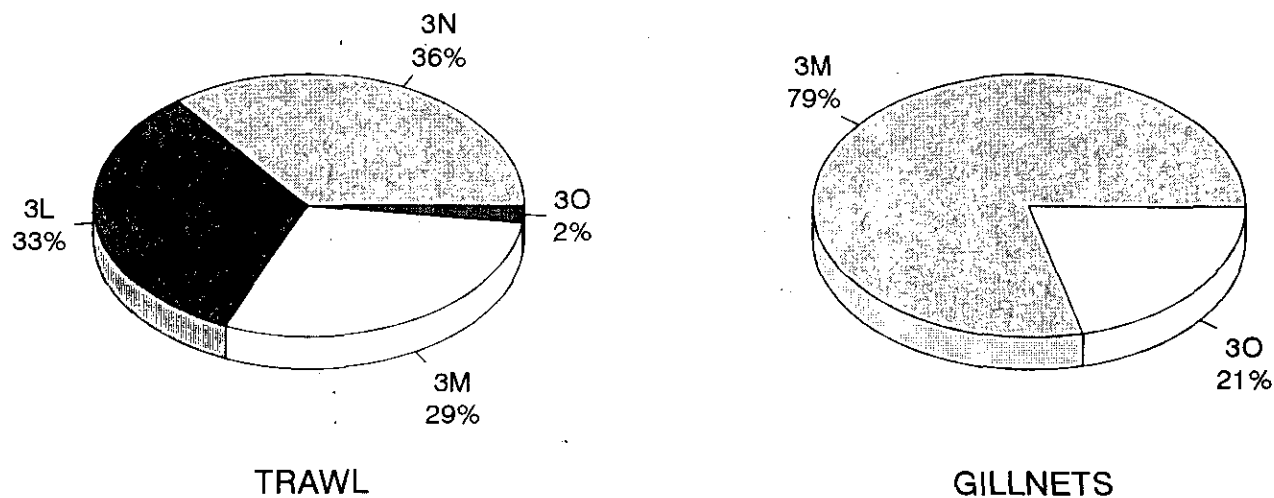


Fig.2: Breakdown of the 1995 Portuguese directed effort by division

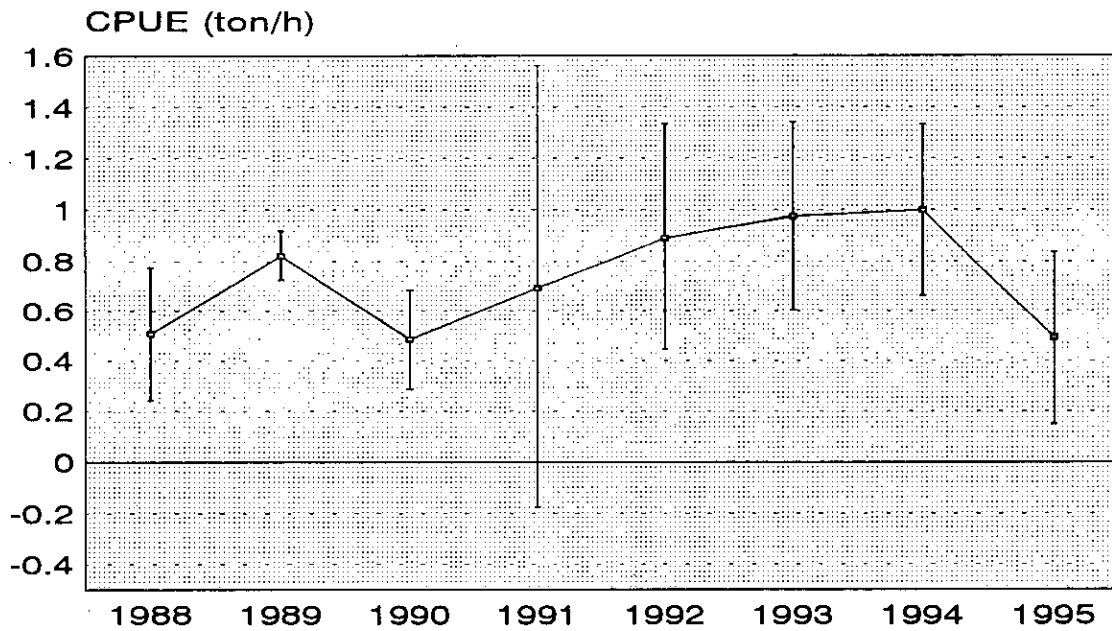


Fig 3A: 3M Cod trawl catch rates, 1988 - 1995

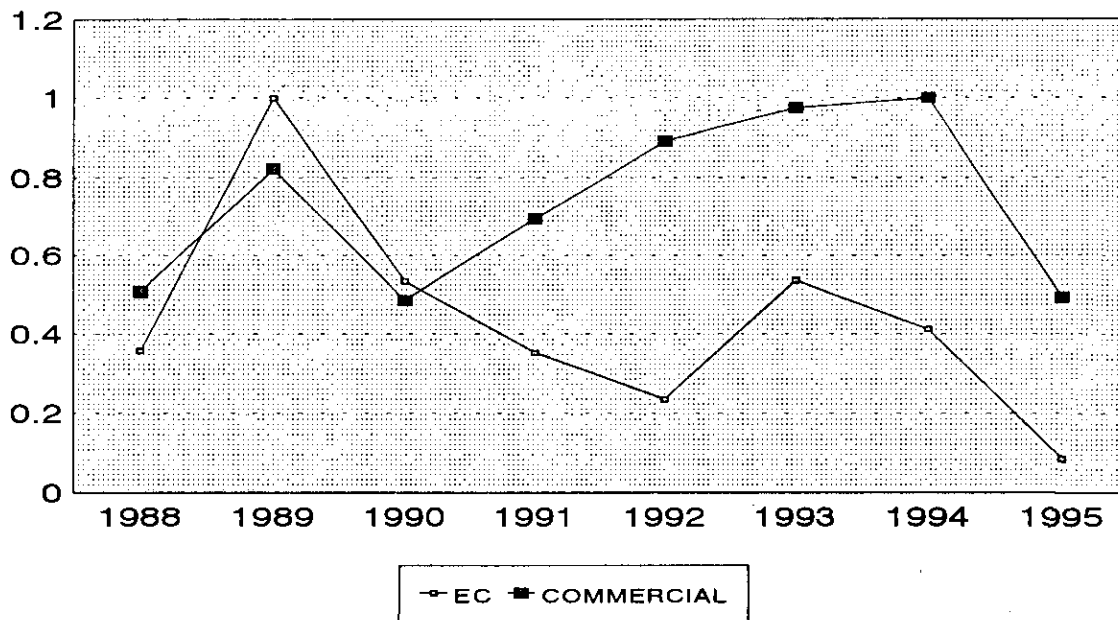
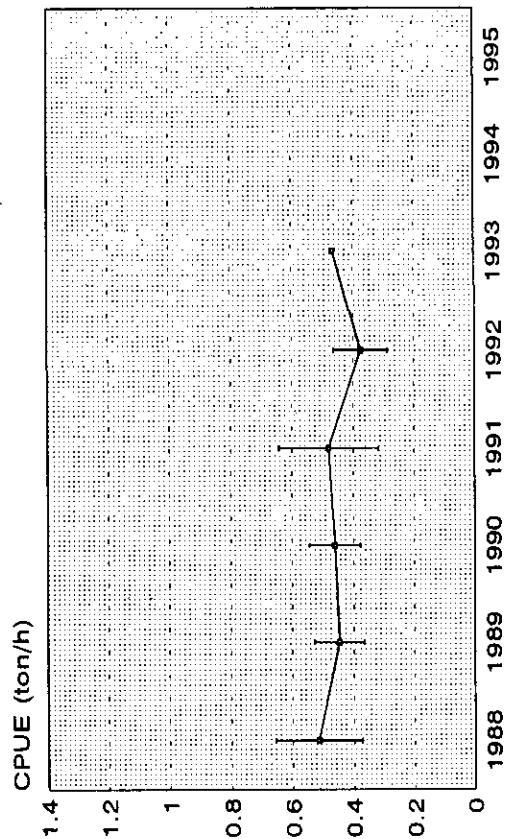
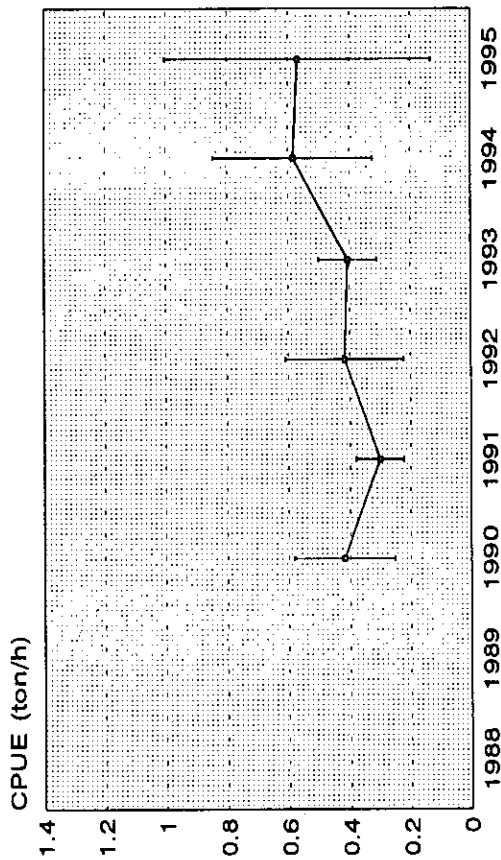


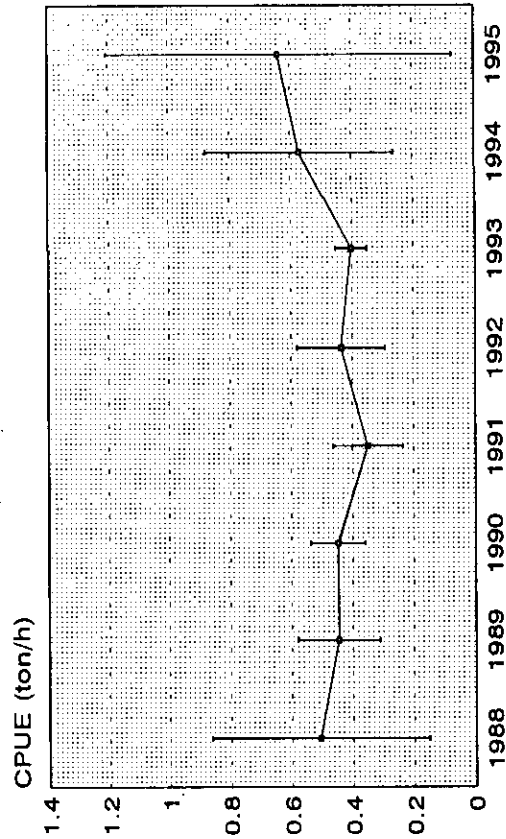
Fig. 3B: Comparison between 3M cod commercial catch rates and 3M cod trawlable biomass indices from the EC surveys (relative values presented as a proportion of the highest value of each series)



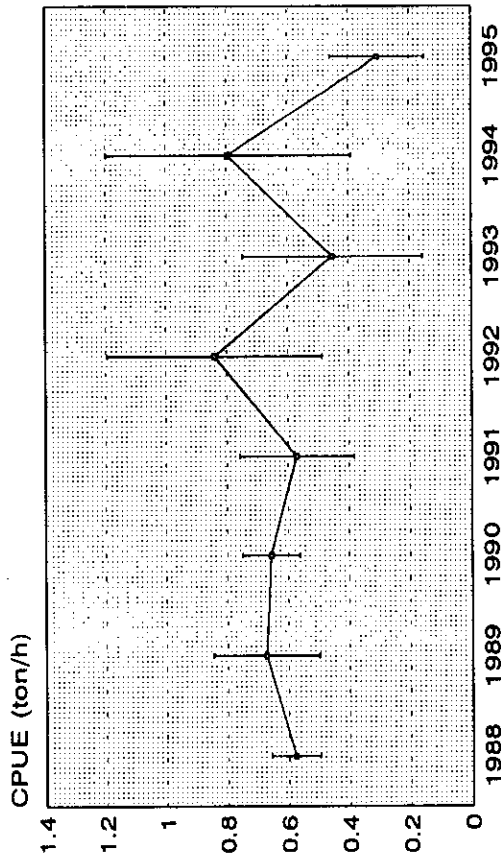
Div. 3L



Div. 3NO



Div. 3LNO



Div. 3M

Fig 4A: Redfish trawl catch rates by division, 1988 - 1995.

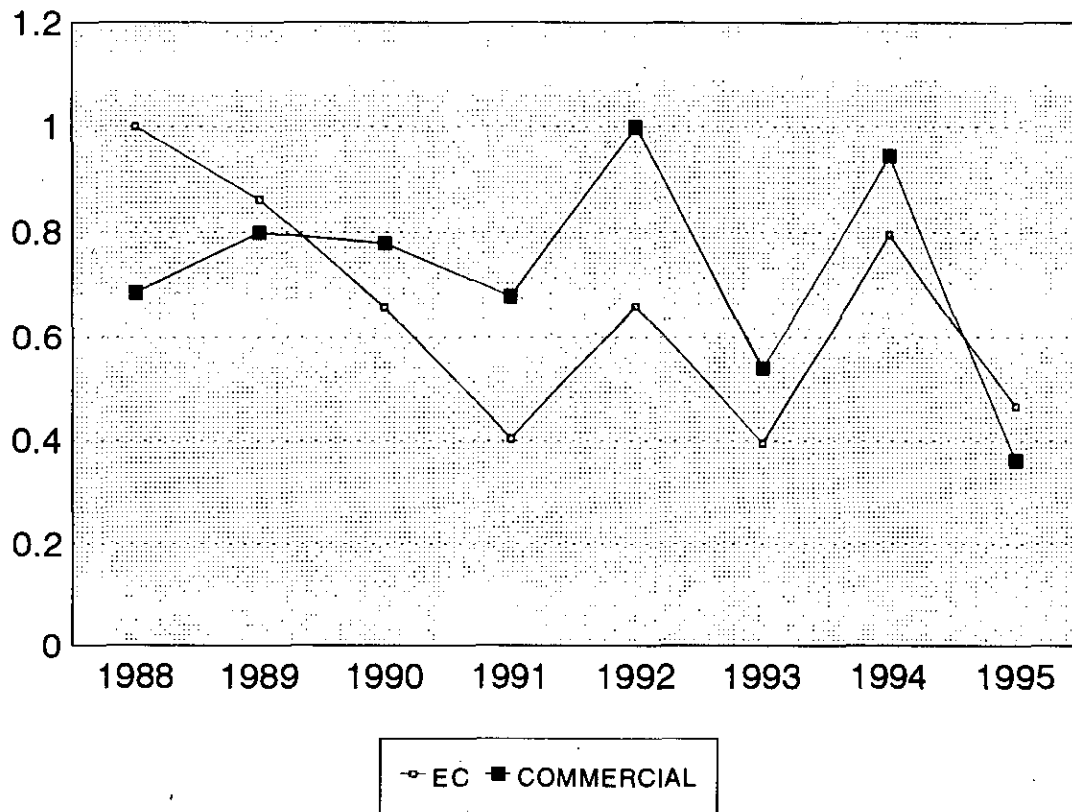
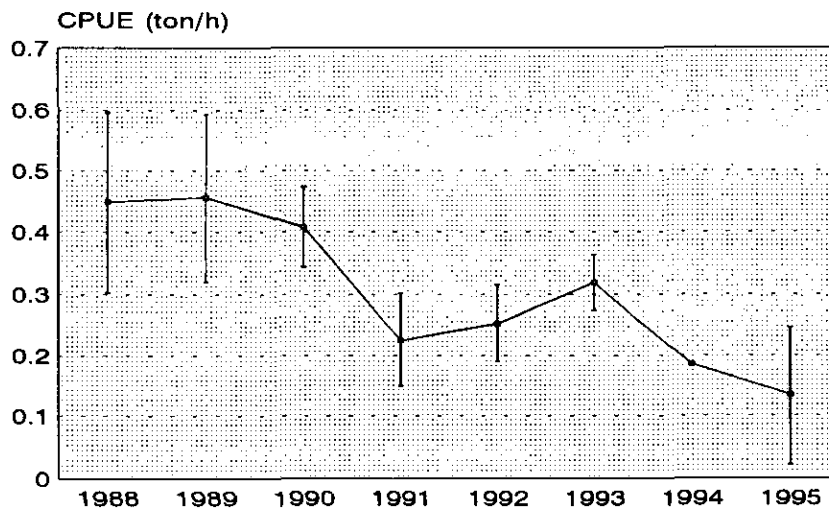
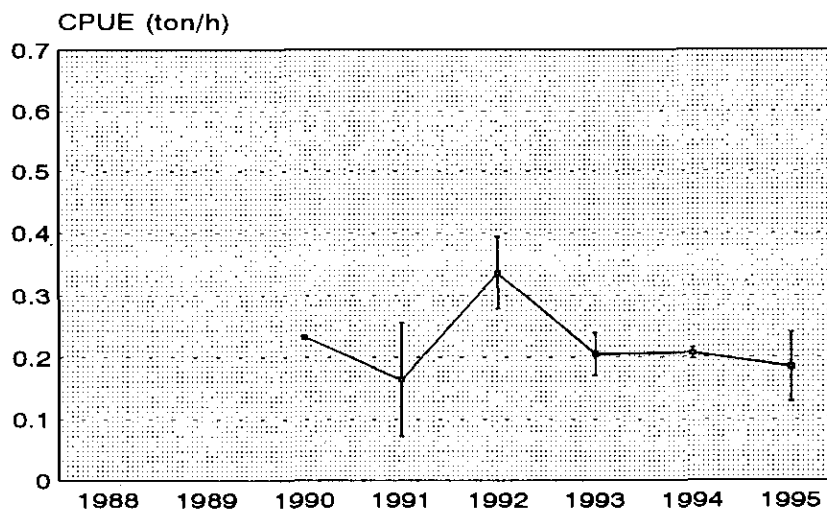


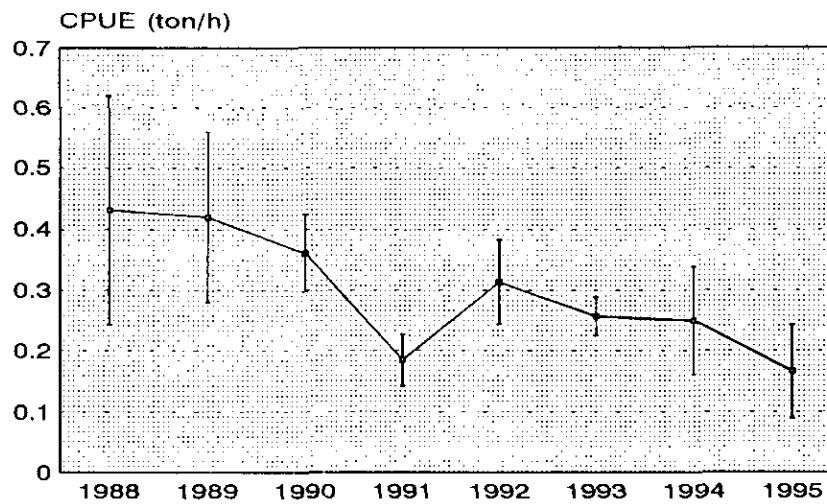
Fig. 4B: Comparison between 3M redfish commercial catch rates and 3M redfish trawlable biomass indices from the EC surveys (relative values presented as a proportion of the highest value of each series)



Div. 3L



Div. 3N



Div. 3LN

Fig 5: Greenland halibut trawl catch rates by division, 1988 - 1995.

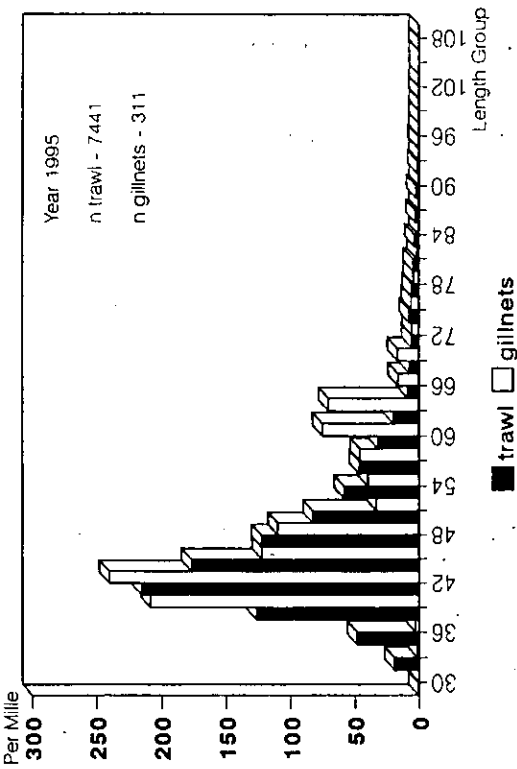


Fig. 6 - Annual length composition of Cod in Division 3M, trawl and gillnet fisheries in 1995.

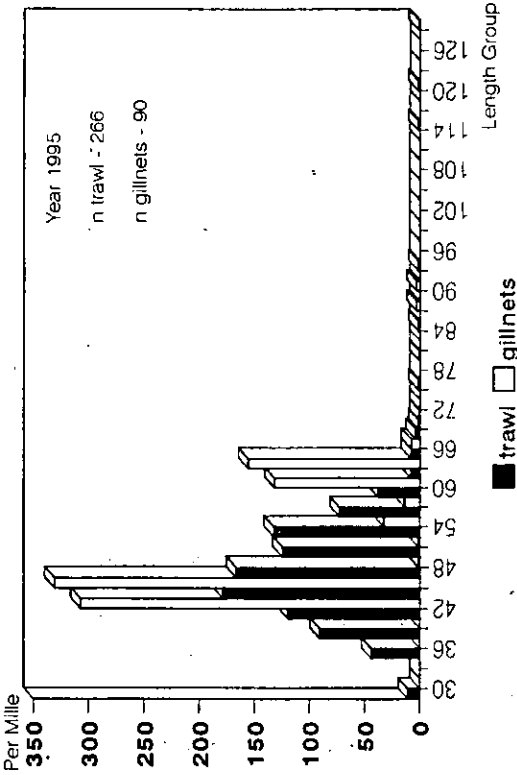


Fig. 7 - Annual length composition of Cod in Division 3O, trawl and gillnet fisheries in 1995.

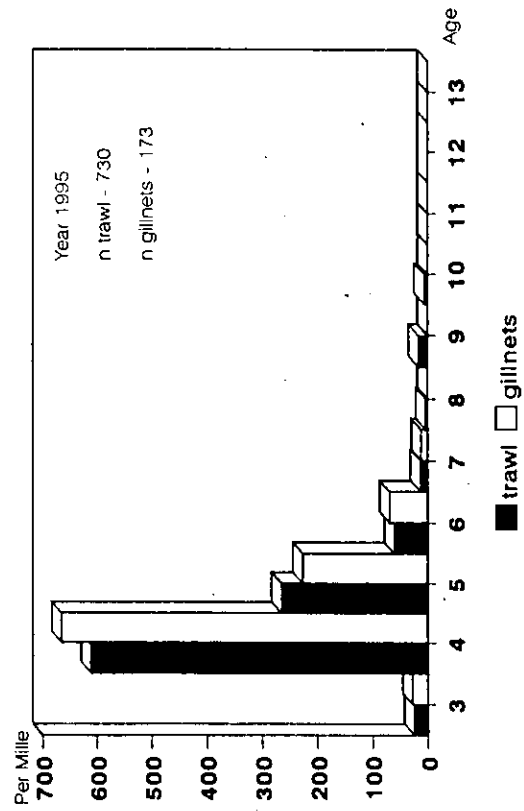


Fig. 8 - Annual age composition of Cod in Division 3M, trawl and gillnet fisheries in 1995.

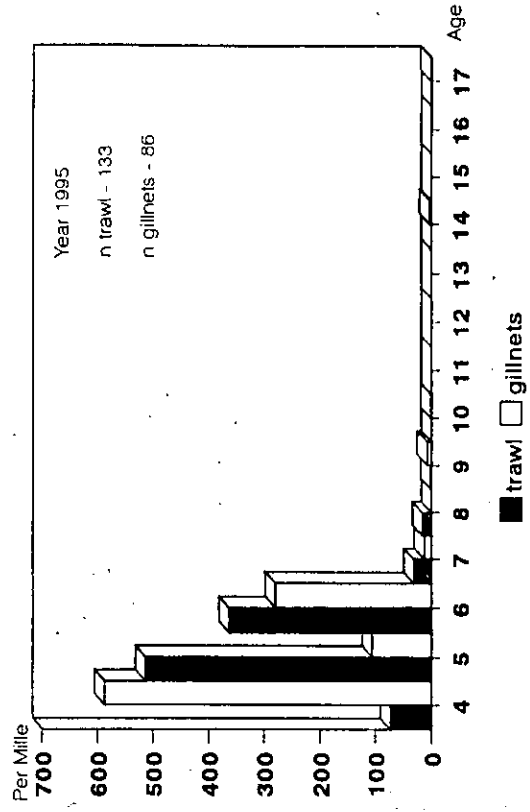


Fig. 9 - Annual age composition of Cod in Division 3O, trawl and gillnet fisheries in 1995.

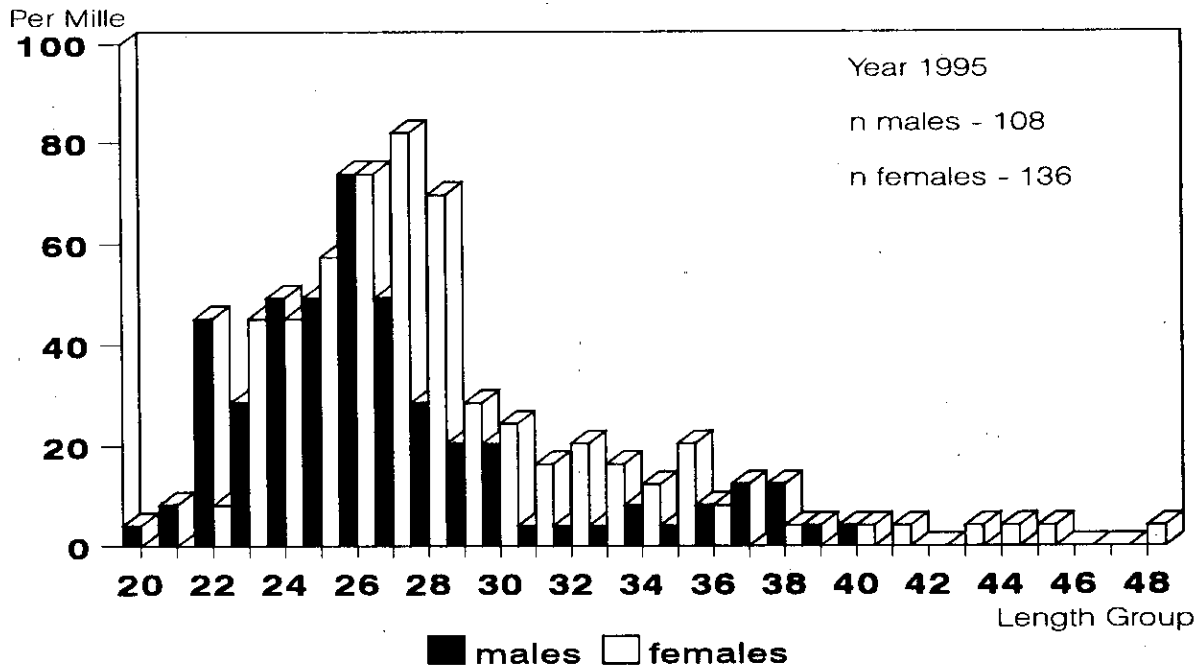


Fig.10- Annual length composition of Redfish, *S.mentella* in Division 3L, trawl fishery in 1995.

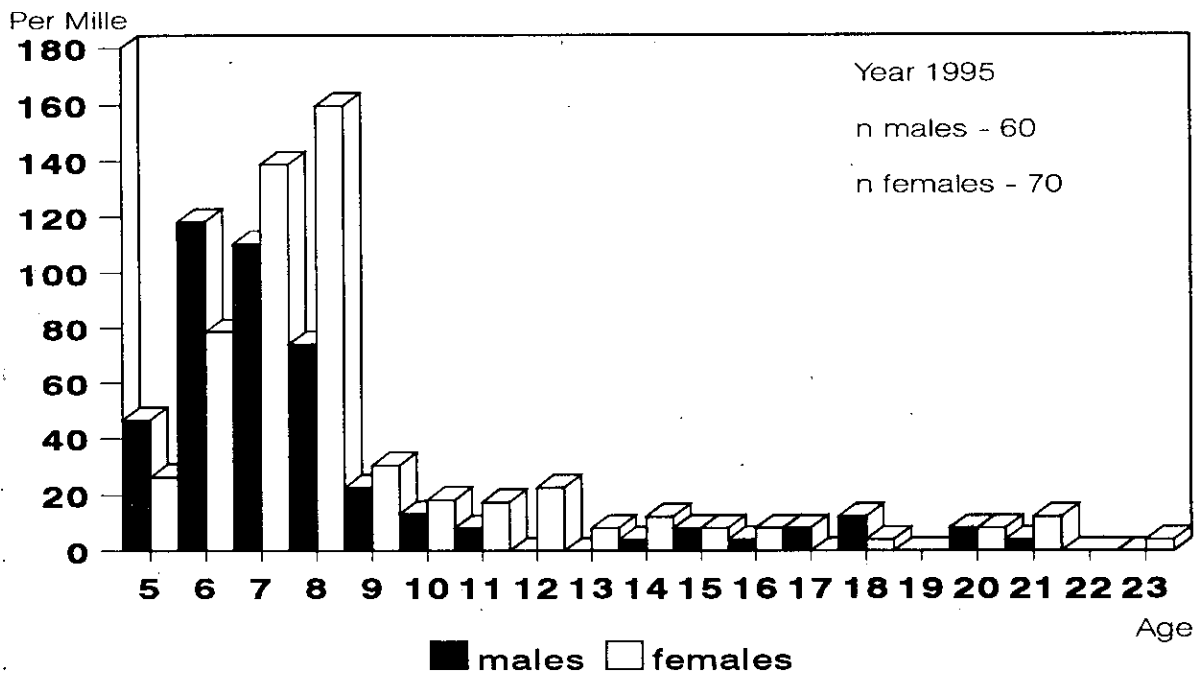


Fig.11 - Annual age composition of Redfish *S.mentella* in Division 3L, trawl fishery in 1995.

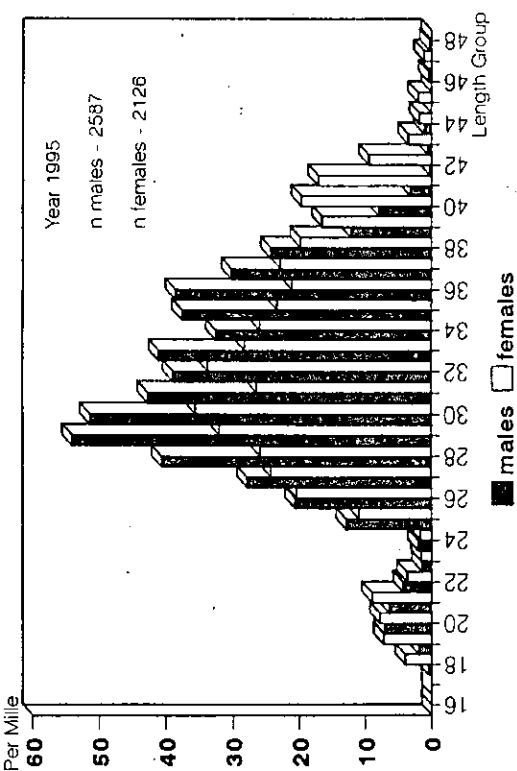


Fig.12 - Annual length composition of Redfish, *S.mentella* in Division 3M, trawl fishery in 1995.

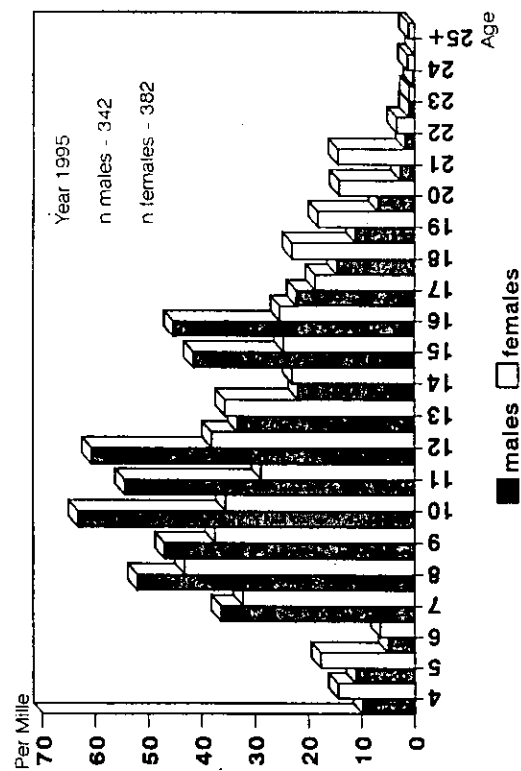


Fig.14 - Annual age composition of Redfish *S.mentella* in Division 3M, trawl fishery in 1995.

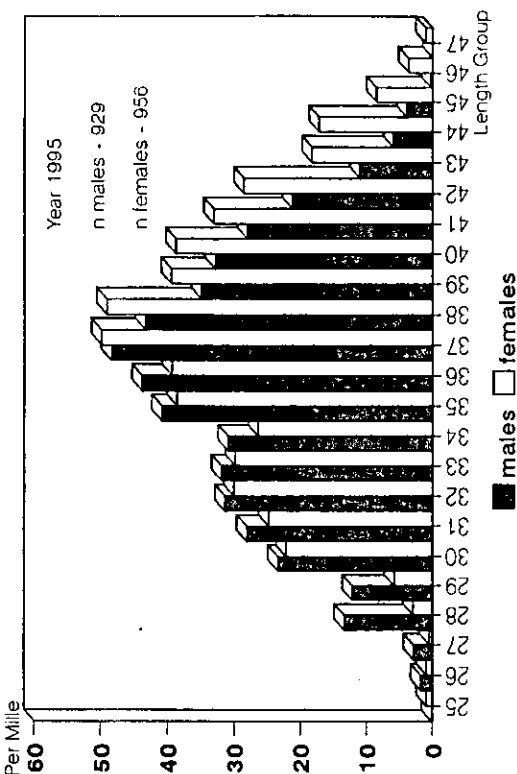


Fig.13 - Annual length composition of Redfish, *S.mentella* in Division 3M, gillnet fishery in 1995.

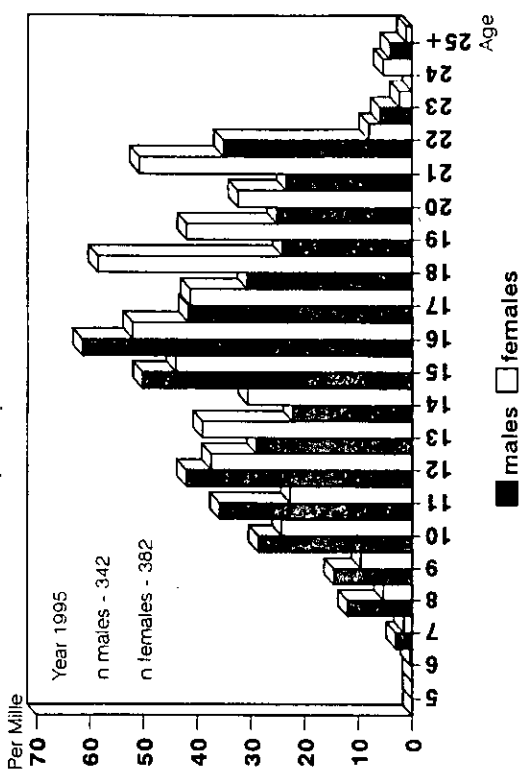


Fig.15 - Annual age composition of Redfish *S.mentella* in Division 3M, gillnet fishery in 1995.

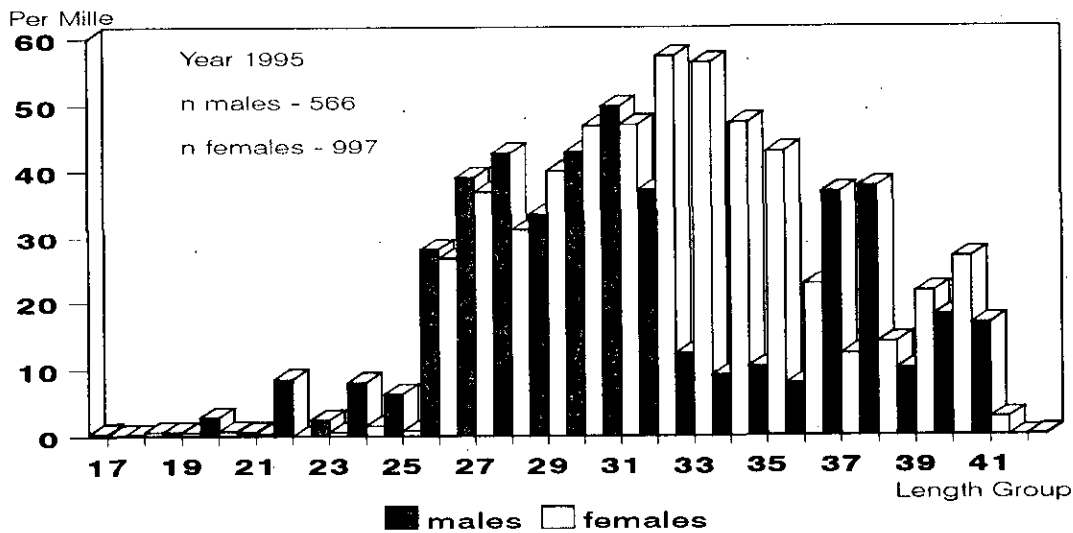


Fig.16 - Annual length composition of Redfish, *S.mentella* in Division 3N, trawl fishery in 1995.

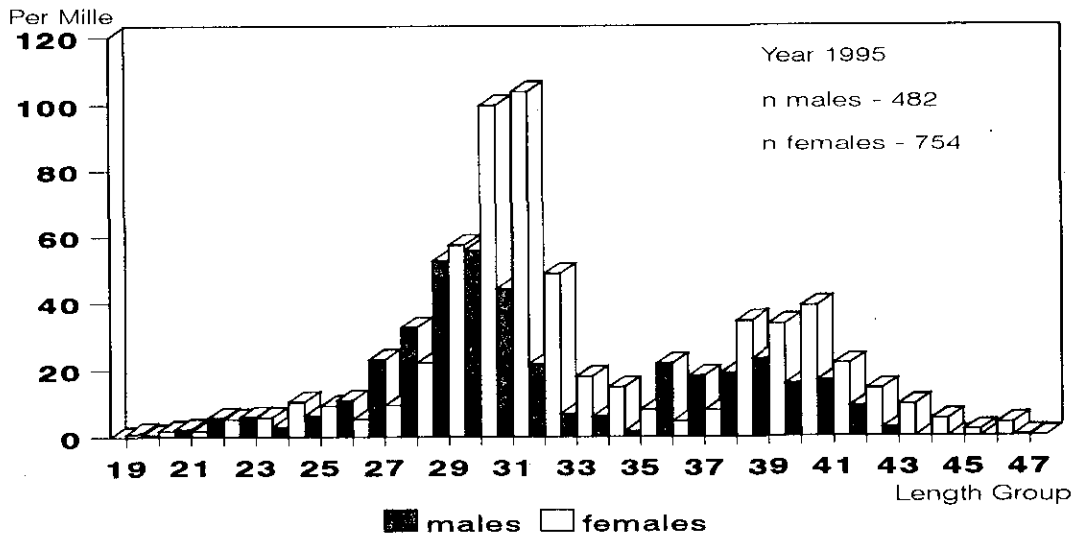


Fig.17 - Annual length composition of Redfish, *S.mentella* in Division 3O, trawl fishery in 1995.

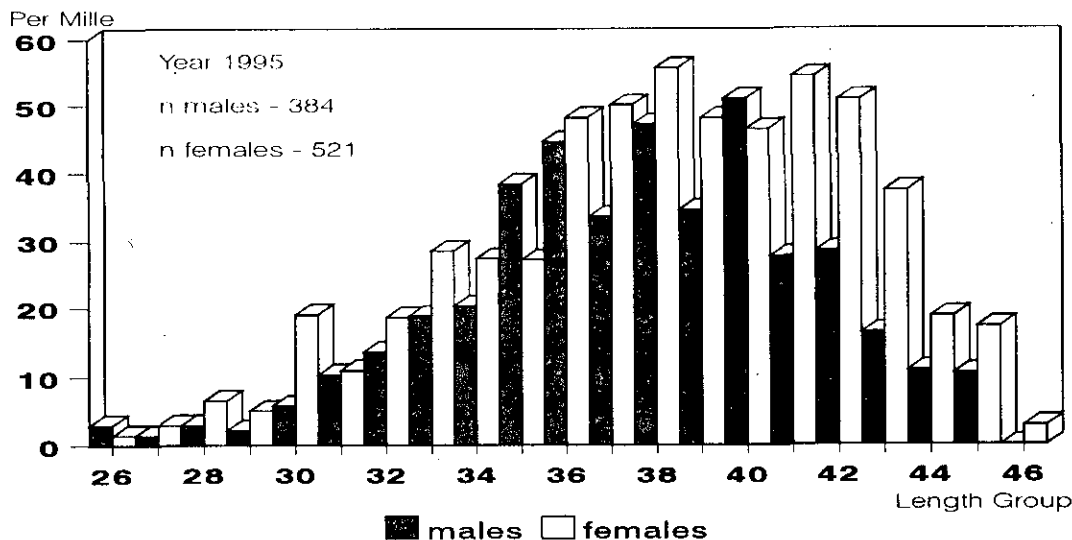


Fig.18 - Annual length composition of Redfish, *S.mentella* in Division 3O, gillnet fishery in 1995.

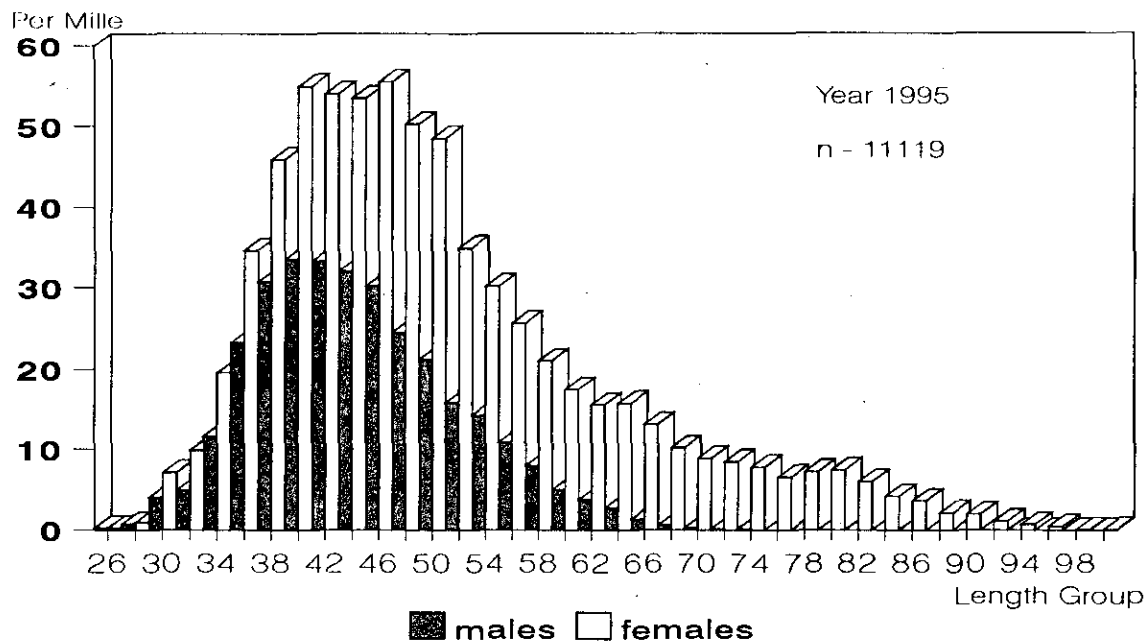


Fig.19 - Annual length composition of Greenland halibut, in Division 3L, trawl fishery in 1995.

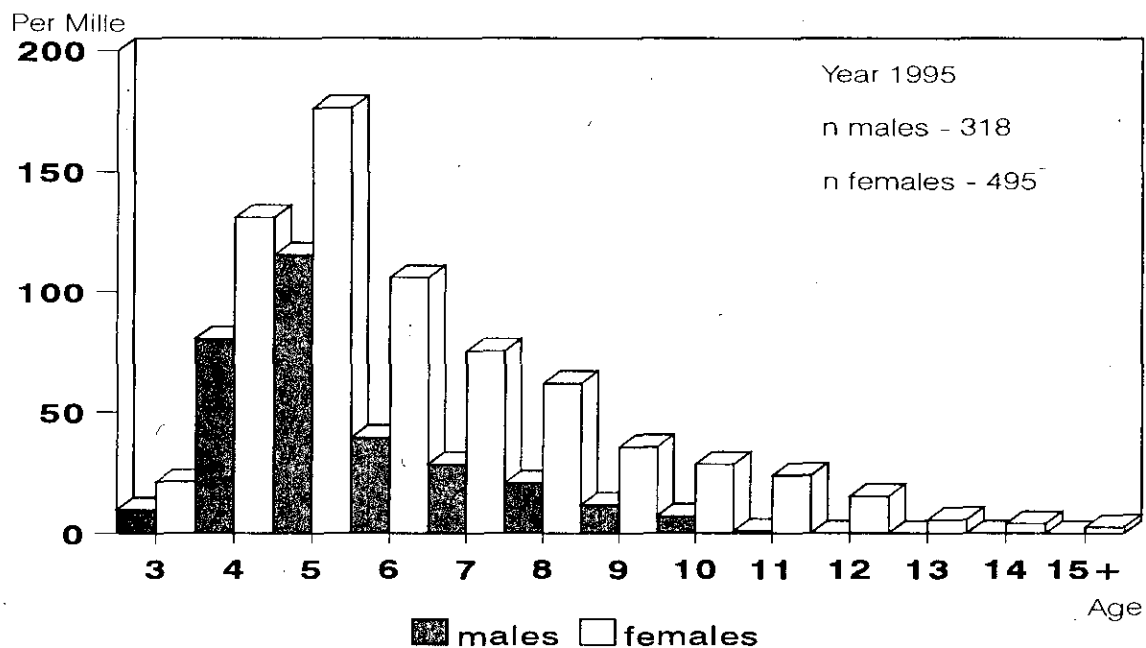


Fig.20 - Annual age composition of Greenland halibut, in Division 3L, trawl fishery in 1995.

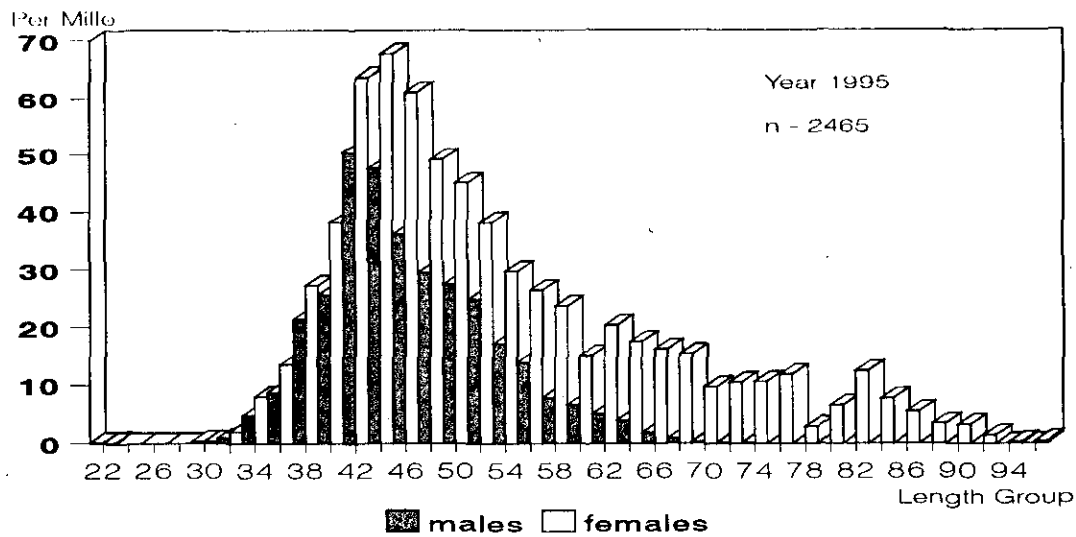


Fig.21 - Annual length composition of Greenland halibut, in Division 3M, trawl fishery in 1995.

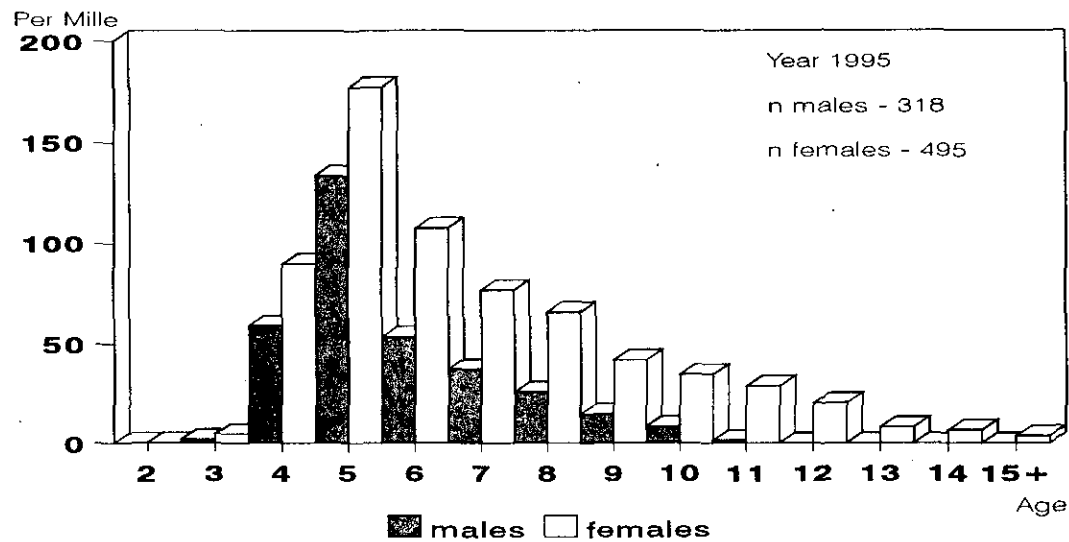


Fig.22 - Annual age composition of Greenland halibut, in Division 3M, trawl fishery in 1995.

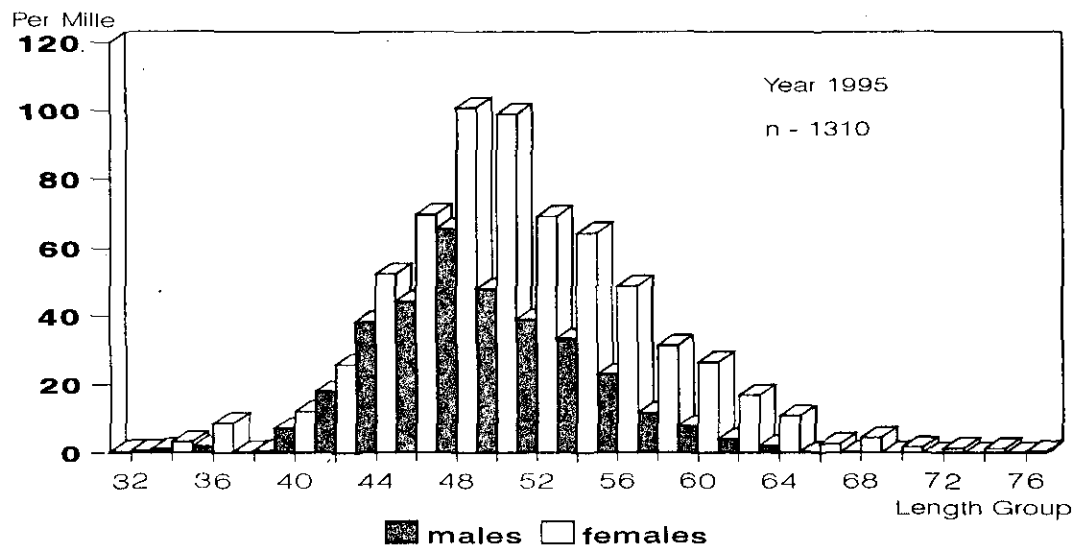


Fig.23 - Annual length composition of Greenland halibut, in Division 3M, gillnet fishery in 1995.

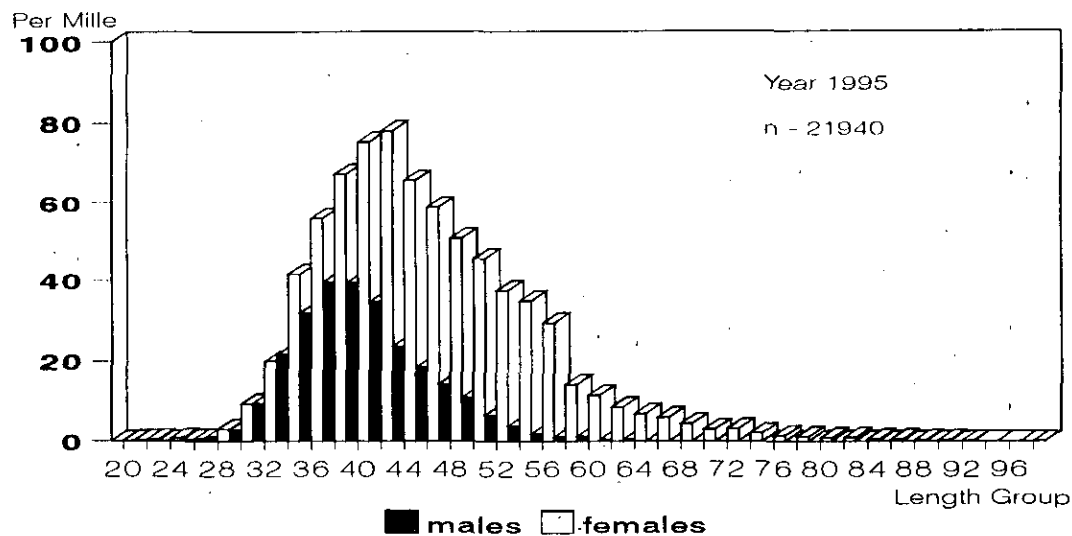


Fig.24 - Annual length composition of Greenland halibut, in Division 3N, trawl fishery in 1995.

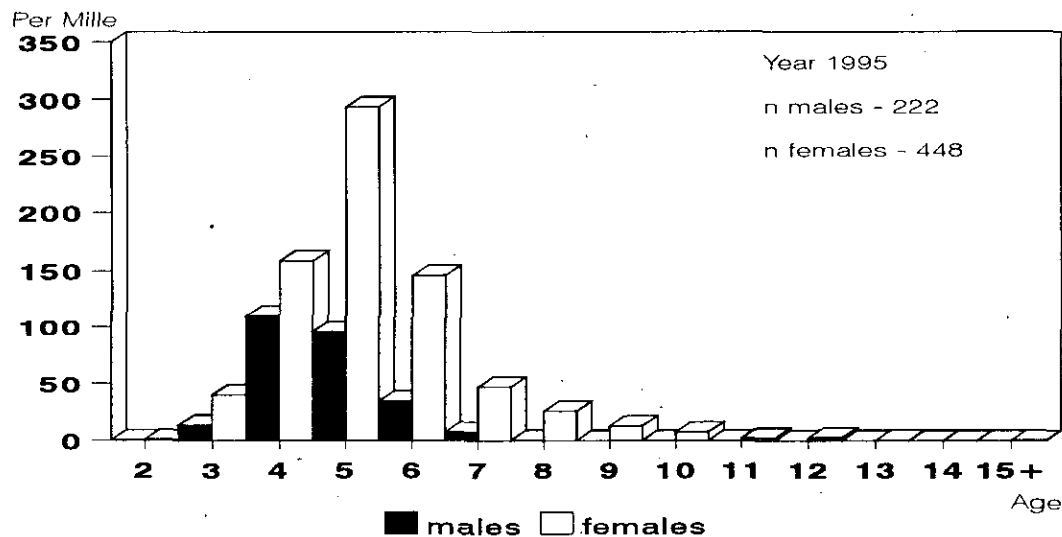


Fig.25 Annual age composition of Greenland halibut, in Division 3N, trawl fishery in 1995.

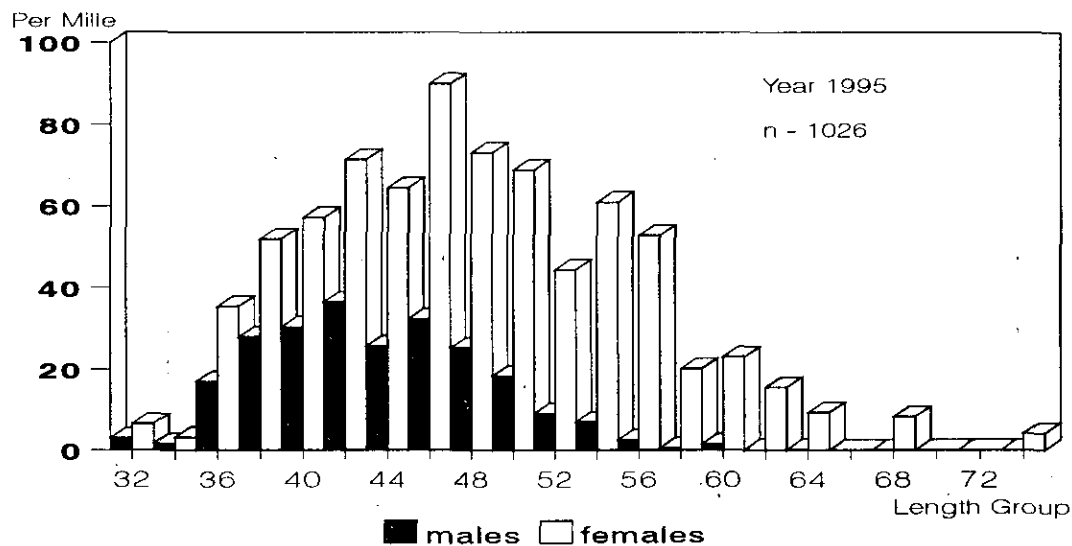


Fig.26 - Annual length composition of Greenland halibut, in Division 3O, gillnet fishery in 1995.

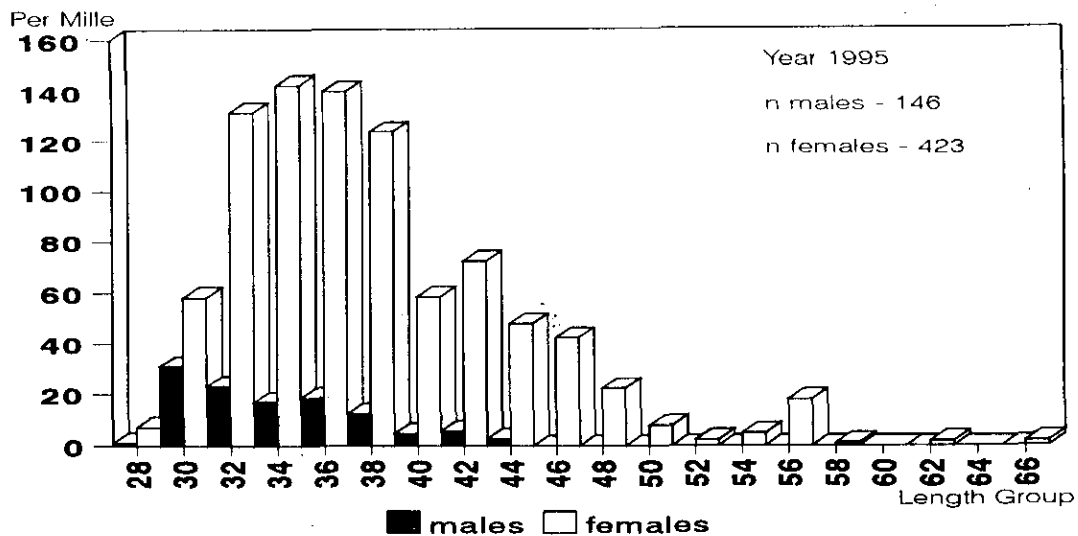


Fig.27 - Annual length composition of American plaice, in Division 3N, trawl fishery in 1995.

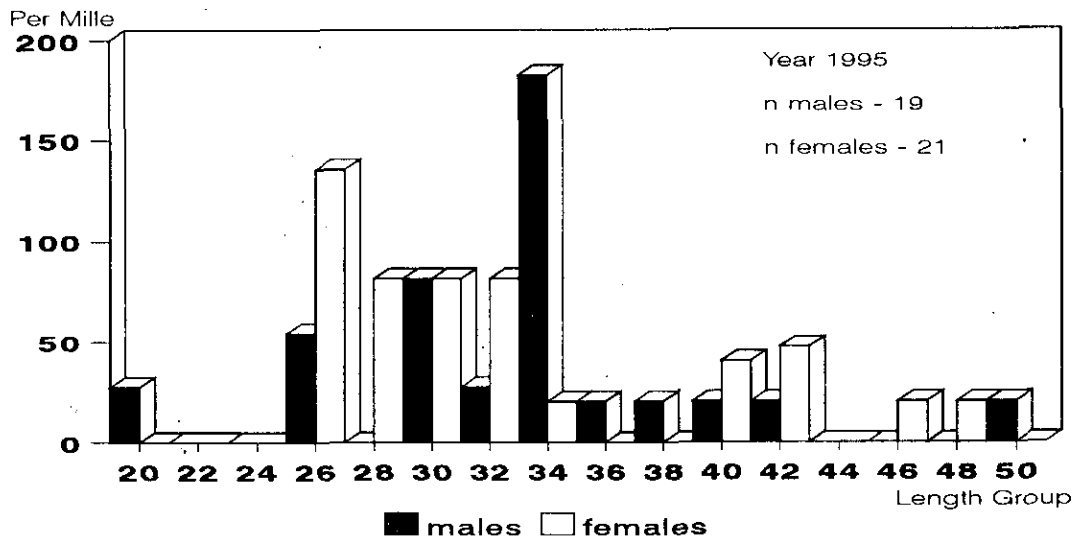


Fig.28 - Annual length composition of American plaice, in Division 3O, trawl fishery in 1995.

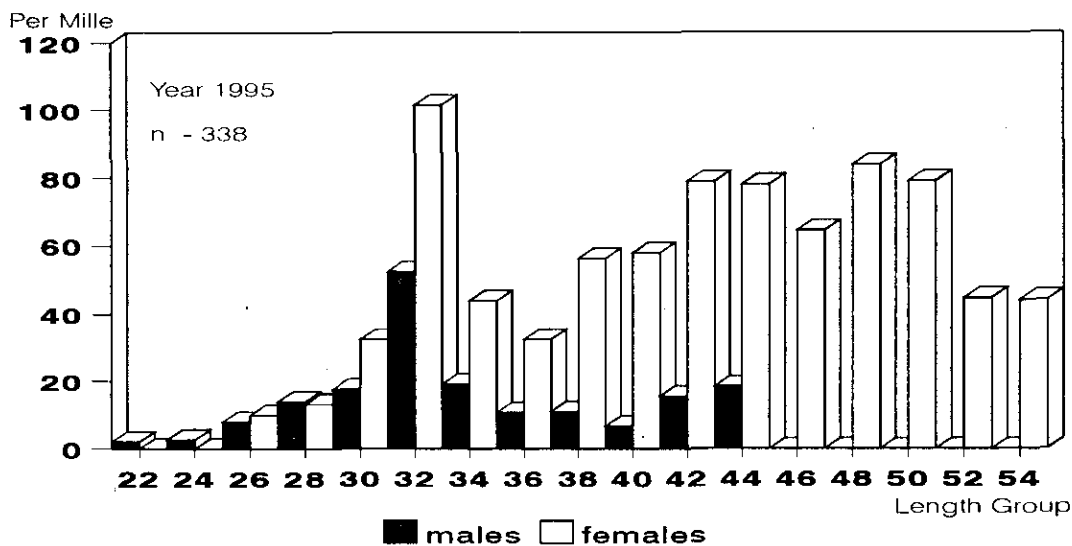


Fig.29 - Annual length composition of American plaice, in Division 3O, gillnet fishery in 1995.

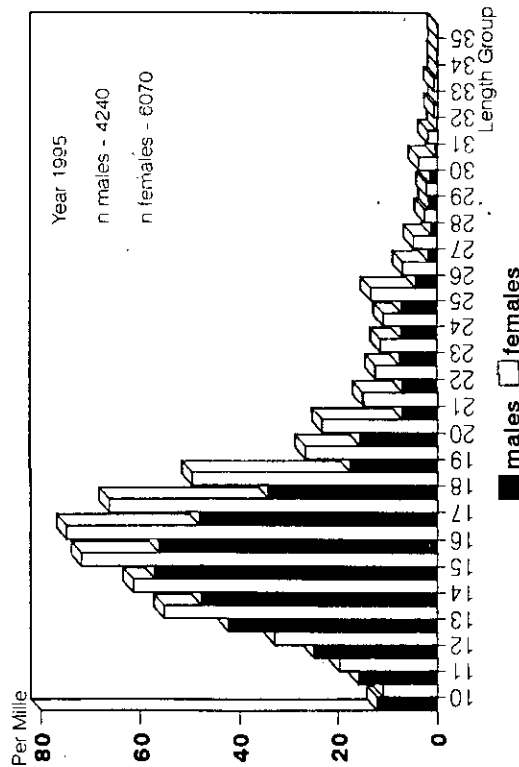


Fig.30 - Annual length composition of Roughhead grenadier in Division 3L, trawl fishery in 1995.

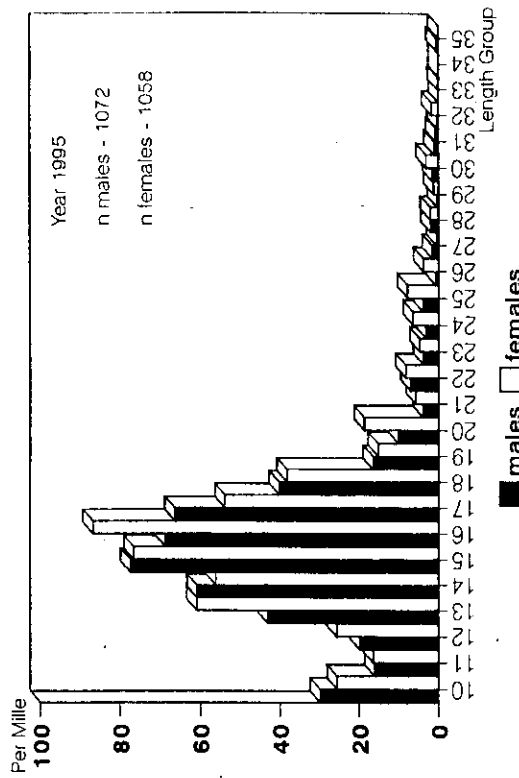


Fig.31 - Annual length composition of Roughhead grenadier in Division 3M, trawl fishery in 1995.

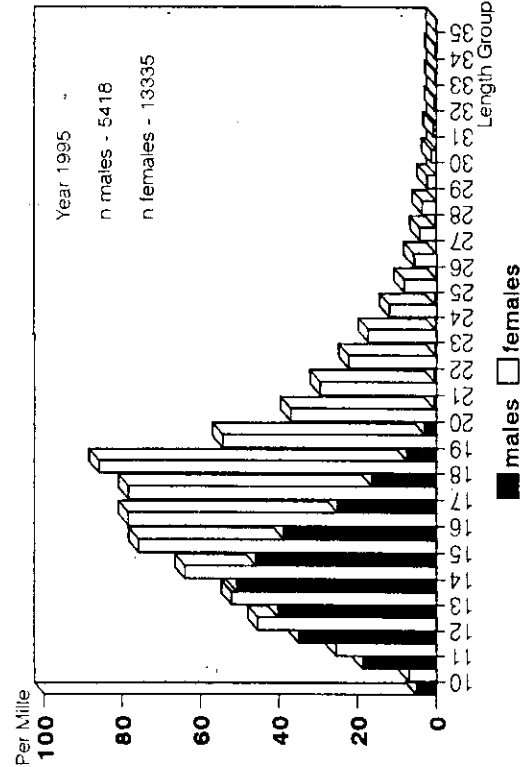


Fig.32 - Annual length composition of Roughhead grenadier in Division 3N, trawl fishery in 1995.

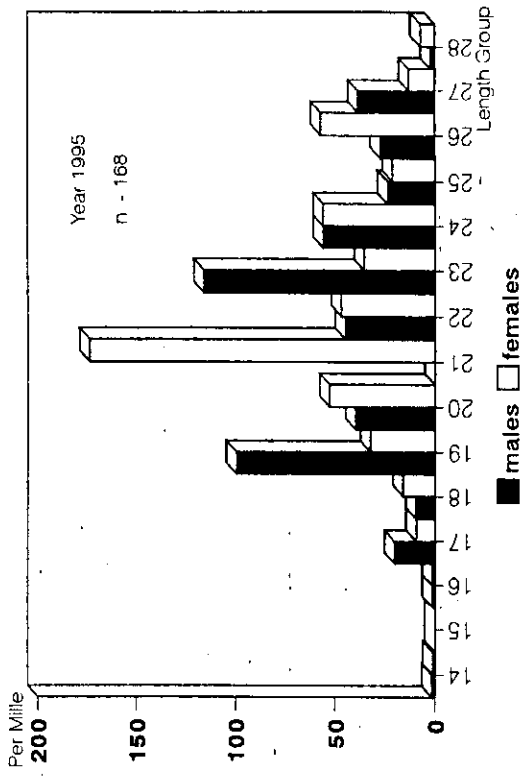


Fig.33 - Annual length composition of Roughhead grenadier in Division 3M, gillnet fishery in 1995.

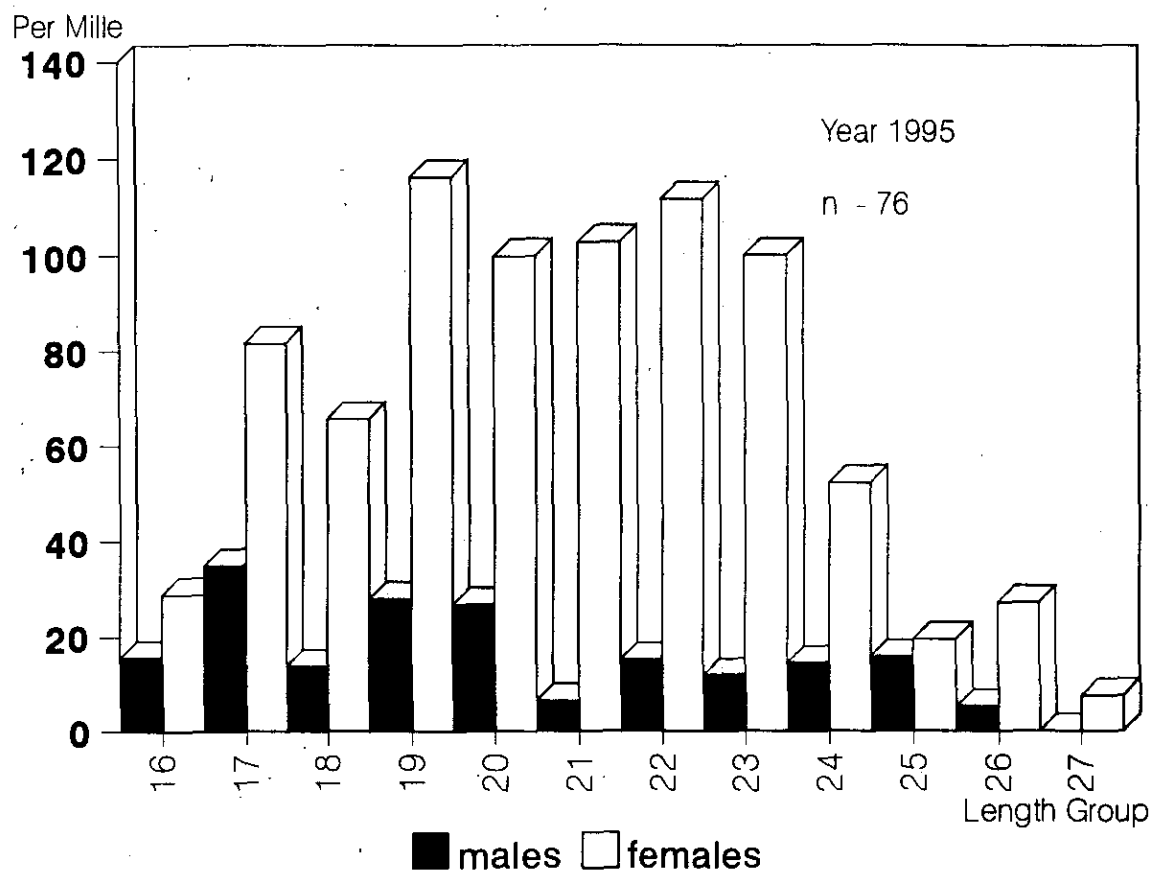


Fig.34 - Annual length composition of Roughead grenadier in Division 30, gillnet fishery in 1995.

APPENDIX

COD, divisions 3N and 3O

$$\log w = -5.2106 + 3.0879 \log l \quad (\text{Hodder, 1964})$$

COD, division 3M

$$w = 0.007204 * l^{3.0632} \quad (\text{Vazquez, 1995})$$

REDFISH, divisions 3L, 3M, 3N and 3O

$$\text{males} \quad w = 0.01659 * l^{2.9548}$$

$$\text{females} \quad w = 0.01372 * l^{3.0210} \quad (\text{Power and Atkinson, 1990})$$

AMERICAN PLAICE, divisions 3N and 3O

$$\text{Log } w = -5.080 + 3.041 \log l \quad (\text{Pitt, 1978})$$

AMERICAN PLAICE, divisions 3M

$$w = 0.002732 * l^{3.3473} \quad (\text{Vazquez, 1995})$$

GREENLAND HALIBUT, divisions 3L, 3M, 3N and 3O

$$w = 0.002184 * l^{3.3454} \quad (\text{Bowering and Stansbury, 1984})$$