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Portuguese Research Report for 1991

by

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A. Status of the fisheries.

The Portuguese nominal catches recorded an overall increase of 12% from 1990 (67,334 ton) to 1991 (75,314 ton). This was basically due to the continuing increase of skate as the main by-catch in the trawl directed fisheries, namely in Divisions 3L and 3N.

Nominal trawl catches of cod have declined in both Divisions 3L and 3N, from 11,156 ton to 8,326 ton and from 1,027 ton to 674 ton respectively. The increase in the nominal catches of cod from Div. 3M (2,838 ton in 1991) is directly related to the end of the moratorium. As for the cod gillnet nominal catches, there is a sharp decline observed in Div. 3N, from 1,043 ton in 1990 to 197 ton in 1991, together with an increase of gillnet cod nominal catch in Div. 3O, from 32 ton to 172 ton.

For redfish the nominal catch in Div. 3N was 2.7 times greater, but the overall figure represents a decline of 30% from 1990 (17,810 ton) to 1991 (12,163 ton) due to the sharp decline of the redfish catches in the Flemish Cap, the major stock for the Portuguese trawlers.

Nominal trawl catches of Greenland halibut in Div. 3N were 4 times greater than the previous year, from 790 ton in 1990 to 3230 ton in 1991, although in Divisions 3L and 3M they have remained constant. All unquoted species have recorded increases in their nominal catches.

Considering the NAFO area as a whole both trawl and gillnet effort have remained constant from 1990 to 1991. There was a transfer of effort of the trawl fleet in 1991 from Div. 3M to Divisions 3L and 3N. The majority of the gillnet fleet, composed of vessels operating their gear directly from board, has remained in 1991 in the Flemish Cap as usual, while the only vessel employing small launches to deploy the nets, traditionally based in Div. 3N, moved partially its fishing effort to Div. 3O.

The nominal catches and effort for 1991 are presented in Tables 1 and 2, by gear and division.

B. Portuguese Annual Sampling Program.

1. Introduction.

During 1991 one stern trawler and one side trawler, working in Divisions 3L, 3M, 3N and 3O, were sampled twice along the year from February to December. One gillnetter working in Divisions 3N and 3O was also sampled from May to September. All of these vessels have already been sampled since 1989. Finally two gillnetters were sampled for the first time in Division 3M, covering the three last quarters of the year.

As in previous years all catch and effort data have been made available through direct daily consultation, on board, of the captain's log-book records. Sampling has been conducted for

cod, redfish, american plaice, greenland halibut, yellowtail and witch flounder. As before sampling of redfish was carried out by species, but the all the redfish catches were considered to belong to *Sebastes mentella* due to the insignificant amount of *Sebastes marinus* presented in the sampled catches in all divisions.

The intensity of sampling during 1991 is presented in Table III, brokendown by month/ gear /species and division.

Using the methodology developed last year for ageing american plaice, age composition of the yellowtail flounder gillnet catches are available for the first time.

For the redfish fishery in Div. 3M catch at age was derived from the *S. mentella* age/lenght key available from the July 1991 EEC bottom trawl survey in Flemish Cap. The age composition of the american plaice trawl catches were derived the same way.

For the 3M cod the sampling of both trawl and gillnet fleets has provide a complete coverage of the Portuguese cod fishery in the Flemish Cap.

2. Results obtained.

Directed effort, catch rates and by-catch levels for the cod, redfish, american plaice, greenland halibut and yellowtail flounder fisheries are presented in Tables IV and VI.

The same type data, but above and bellow the 400m depth line, are presented for the redfish and cod trawl fisheries in tables V, including the cod by-catches in Div.3M.

Cpue's at age for cod, redfish and american plaice are presented in Tables VII.

Length compositions by gear/division for cod, redfish, greenland halibut, american plaice, yellowtail flounder and witch flounder are presented by this order from Tables VIII to XIII.

Age compositions by gear/division for cod, redfish, american plaice and yellowtail flounder are presented from Tables XIV to XVII.

The length/weight relationships used in the computation of the mean weights in the catch and of the mean weights at age are presented as an appendix of this report.

3. Comments on catch and effort data (from the trawlers and gillnetters sampled).

Division 3L.

Although cod and redfish continued to be the main target species in this division, directed trawl effort to american place is recorded for the first time in March and April with a catch rate about 0.2 t/h. From 1990 to 1991 the high trawl cod catch rates have beeing kept constant, around 1.1 t/h, despite the sharp increase of 2.7 times of the trawl directed cod effort, concentrated entirely on the first half of 1991. The majority of the trawl effort directed to cod was applied in depths bellow 400m, reaching maximum catch rates in February and March, up to 3.15 t/h (February, stern trawler). Redfish catch rates declined from about 0.55 t/h in 1990 to 0.45 t/h along with a sharp decline of the directed effort, which in 1991 was reduced to 22% of the previous year. No significant differences are detected for the redfish catch rates above and bellow the 400m depth line. Directed effort and catch rates for greenland halibut maintained the decline already detected in 1990, with an average catch rate for 1991 of 0.42 t/h.

Division 3M.

Redfish has been in 1991 the main target species in the trawl fishery, with a directed effort increasing steadily since

1989, and catch rates being stabilized around 0.58 t/h. Redfish directed effort was distributed equally above and below depths of 400m with no significant differences within the respective catch rates. By- catch of cod almost disappeared in the redfish fishery above depths of 400m, while the cod by-catch proportion at greater depths remained constant from 1990 to 1991 at around 9%. Directed cod trawl catch rates were about 0.45 t/h, less than half of the mean catch rate observed in Div. 3L. Gillnet cod catch rates averaged 8.8 Kg/net/day, with a maximum of 12.8 Kg/net/day recorded in December.

Division 3N.

Flatfish trawl fisheries recorded an overall increase of both directed effort and catch rates in this division: american plaice with a directed effort 2.6 greater than in the previous year together with an increase of 40% in its catch rate, corresponding to an average of 0.34 t/h; yellowtail flounder with directed effort for the first time recorded in May, September and October, corresponding to an attractive average catch rate of 0.62 t/h; and finnaly greenland halibut was also for the first time recorded as target species in this division, in all the quarters of 1991, although with a small catch rate of 0.19 t/h. Trawl catch rates for cod were stabilized around 0.28 t/h, despite a recorded directed cod effort in 1991 2.4 times greater than in the previous year. Cod gillnet catch rate also continued to increase, 30% from 1990, reaching an average value of 9.049 Kg/net/day. Nevertheless gillnet effort almost droped 50% in 1991 due to the very attractive cod yields in Div. 3O. As for the redfish, catch rates decreased 35% from 1990 being at 0.29 t/h, while directed effort increased about 1.7 times from the previous year.

Division 3O.

Although this division is not, untill now, a fishing ground for the Portuguese trawl fleet, occasional hauls made in Div. 3O showned redfish as the main species in the catch, with catch rates increasing from 0.3 t/h to 0.5 t/h between 1990 and 1991. Neverhteless the major change in this division are the very high gillnet cod catch rates recorded in 1991, with an average of 13.3 kg/net/day and an overall maximum for all divisions (since 1989) in June of 19.183 kg/net/day.

4. Comments on length and age composition.

Division 3L.

Portuguese cod catches were dominated by the 1986 and 1987 year classes corresponding to lengths between 33 and 45cm (Figs. 1 and 2). Compared to 1990, mean weights at age decreased in nearly all age groups presented in the catches.

Redfish male catches recorded two modes at 28 and 24cm while in female catches 23 and 24cm were the most abundant length classes (Figs. 7 and 8).

Greenland halibut catches were dominated by lengths from 34 to 50 cm (males) and 40 to 54 cm (females, with modes at 44 and 46 cm (Figs. 15 and 16)). Mean length of the catches decreased from 1990 to 1991.

Division 3M.

Age composition of cod in Div. 3M cover both trawl and gillnet components of the fishery. Trawl catches, sampled during the 3th and 4th quarter, were dominated by the 1988 year class, with lengths from 36 to 42cm, followed by the 1986 one, with 50 to 60cm. Mean weight at age increased from 1990 to 1991. Gillnet catches, sampled from May to December, were dominated by the 1985 and 1986 year classes (Fig's 2 and 3).

Redfish trawl catches were dominated by the 1983 year class, closely followed by the 1982 one. The young 1986 year class, considered in 1990 as relatively strong, didn't come out in the 1991 redfish catches (Figs. 9 to 12).

Male American plaice at age 5 are the most abundant group in the trawl and particularly in the gillnet catches, although for trawl, ages 7 and 8 are also well represented. As for females, ages 7 and 9 are clearly evident in trawl, followed by ages 5 and 9. Gillnet female catches present two modes at ages 5 and 12 (Figs. 19 to 22).

DIVISION 3N.

The trawl cod catches, sampled during the 4th quarter, were dominated by the 1989 year class which might indicate that a good year class can be coming after 6 years of poor recruitments. The gillnet catches, for both Divisions 3N and 30, were dominated by the 1981 and 1982 year classes (Figs. 5 and 6).

Catches of redfish were largely composed by fish with lengths between 19 and 28cm for males, and 20 to 32cm for females. Males present a very clear mode at 25cm. Females present a mode at 20 cm and an even distribution from 24 to 30cm, forming the bulk of the redfish catches in this division (Figs. 7 and 8).

Greenland halibut catches were dominated, both for males and females, by lengths between 40 and 44cm (Figs. 17 to 18).

American plaice trawl catches were dominated, for males and females, by the 1985 year class followed by the 1986 one. The gillnet catches were basically composed by the age groups 7, 8 and 9 for both sexes, plus the age group 10 only well represented in the female catches (Figs. 23 to 26).

TABLE I : PORTUGUESE NOMINAL CATCHES (st) IN NAFO AREA, 1991

SPECIES	DIVISION											
	3L		3N		3N		30		TOTAL		TOTAL	
	OT	GNS	OT	GNS	OT	GNS	OT	GNS	1991	1990	1989	1988
Cod	8325.9	1132.9	2321.4	516.4	674.1	198.6	17.8	172	13357	15138	24129	12931
Redfish	5075.8	23	3693.2	96	3272.9	0.2	3.4	0	12183	17810	18870	17072
American plaice	208.2	5.2	977.4	20.2	62.45	3.8	3.3	7.107	1288	714	1021	1781
Yellowtail(1)	0	0	0	0	7.45	2.0	0	0.693	10	11	5	
Witch flounder	963.2	0.5	298.1	2.3	181.9	2.9	8.5	4.1	1982	2254	16	12
Greenland halibut	8839.6	67	1921.4	72.1	3232	0.4	28.4	0.4	13001	11170	3614	4194
Atlantic halibut	89.8	1.4	88.5	5.4	61.4	0.2	0.4	0.5	228	81		
Roundnose grenadier	2164.8	1.2	553.5	2.4	1153.9	0	10.1	0	4486	3211	280	914
Anarhiches spp.	1262.8	13.3	821.3	86.4	638.4	0	20.3	0	2842	1940		
Haddock	0	0	0	0	2.1	16.8	7.8	56.7	83	17		
Pollack	2.8	91.2	0.1	225.5	0	101.5	0	0	421	11		
Red hake	97.5	118.9	128.9	473.6	18.2	33.2	15.8	123.9	1000	467		
Capelin											77	
Monkfish	0	0	0	0	1.9	2.1	1.2	3.8	10	2		
Skates	13994.8	9	2187.5	16.7	7011.8	1.5	19.6	0.1	23301	13589	683	1097
Unidentified	24.5	18.8	35	25.7	66.8	0	3	0	174	852		
TOTAL	61429.9	1483.4	13028.3	1561.1	16803.3	381.8	198.2	389.3	75316	87334	48400	38011

(1) From the 1991 sampling, yellowtail trawl catches mixed with american plaice are not significant, except for September and October in Div. 3N when the mean proportion of yellowtail in those flatfish catches was about 25%. In Div. 30 no yellowtail catches were recorded in the trawlers sampled.

In Div. 3N the proportion of yellowtail in the gillnet flatfish catches was kept constant from 1990 at 30%. In Div. 30 these proportion was in 1991 of about 22%.

TABLE II : PORTUGUESE EFFORT IN FISHING DAYS AND FISHING HOURS (TRAWL) OR NUMBER OF NETS (GILLNETS), IN NAFO AREA IN 1991.

MONTH	DIVISION											
	3L			3M			3W			30		
	OT	DAYs	GNS	OT	DAYs	GNS	OT	DAYs	GNS	OT	DAYs	GNS
JAN.	97	928		2	21							
FEB.	167	1598		17	176							
MAR.	313	4163	40	11759	10	104		3	26			
APR.	569	7966	41	12053	101	1048	10	2940	62	748		
MAY	238	3560	26	7643	291	3189	49	14405	108	1522	22	5280
JUN.	372	6034	22	8681	68	802	5	1973	79	1288	3	49
JUL.	179	2801	13	5985	133	1568	42	19337	105	1544	11	3882
AUG.	71	589	36	23209	111	1510	97	62535	223	3151	15	5647
SEP.	84	868	19	9859	150	2618	38	19717	216	3845	12	3900
OCT.	134	1943	36	15660	177	3167	48	20880	362	5712		1
NOV.	166	2390	32	11917	173	2592	55	20483	143	2155		
DEC.	154	2218	2	600	56	764	9	2700	139	1893		3
TOTAL	2564	35059	267	107366	1289	17555	353	164969	1440	21883	60	18709
											24	332
											32	11363

Note: Fishing hours and number of nets estimated from their monthly rates to fishing days observed in the trawlers and gillnetters sampled by the INIP.

Monthly effort of gillnetters is given by the sum of the number of nets per fishing day.

TABLE II : (cont.)

MONTH	TOTAL 1991				TOTAL 1990				TOTAL 1989			
	OT		GNS		OT		GNS		OT		GNS	
	DAYs	HOURS	DAYs	NETs	DAYs	HOURS	DAYs	NETs	DAYs	HOURS	DAYs	NETs
JAN.	99	949			123	1616	25	6241	351	4612		
FEB.	184	1774			155	2255	16	3994	348	5063		
MAR.	326	4293	40	11759	418	5785	43	10735	382	5287		
APR.	732	9780	51	14992	523	7019	45	14648	375	5033	6	1760
MAY	647	8412	104	29428	448	5833	74	24087	383	4987	127	43917
JUN.	522	8172	42	16174	400	5780	81	29962	501	7239	161	63164
JUL.	422	5986	71	31147	293	4647	164	61516	301	4774	112	44834
AUG.	407	5266	153	93191	482	8271	126	47263	178	3054	176	73251
SEP.	450	7330	68	33678	469	7663	39	14629	219	3578	52	19809
OCT.	674	10833	84	36540	466	6431	87	15377	361	4982	36	13885
NOV.	482	7137	87	32400	968	13358	30	9464	270	3726	22	8485
DEC.	352	4915	11	3300	281	3878	4	818	181	2498		
TOTAL	5297	74829	712	302407	5026	72536	714	238732	3850	54833	692	268885

TABLE III: Intensity of sampling during 1981, 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	3L	FEB.	5	278	585	141 32-103 cm
		MAR.	16	1914	1984.15	331 21-111 cm
		APR.	14	1940	1520	289 24-110 cm
		MAY	1	83	107	78 32-83 cm
		JUN.	1	708	583	240 20-81 cm
		DEC.	1	70	100	27 22-81 cm
3N	3W	AUG.	3	271	560	160 23-80 cm
		SEP.	2	84	210	81 48-74 cm
		OCT.	3	203	402	135 36-84 cm
		NOV.	4	449	549	218 24-99 cm
		DEC.	1	74	200	30 56-79 cm
3N	3W	SEP.	5	616	322	180 22-120 cm
		OCT.	4	633	300	110 19-120 cm
		NOV.	1	96	100	8 50-81 cm
		DEC.	5	602	510	170 22-75 cm
REDFISH	3L	FEB.	1	138	102	
		MAR.	1	78	22	
		MAY	7	1028	413.5	
		AUG.	2	194	151	
		SEP.	3	455	218	
		OCT.	11	2230	925	
		NOV.	4	990	335	
3N	3W	APR.	5	572	248	
		MAY	3	453	160.5	
		AUG.	6	1230	440	
		SEP.	2	241	135	
		OCT.	9	1883	678	
		NOV.	17	3845	1455	
		DEC.	7	1640	582	
3N	3W	APR.	3	397	167	
		AUG.	13	2242	870	
		SEP.	8	1484	565	
		OCT.	2	430	157	
		NOV.	3	639	250	
		DEC.	3	625	245	
3O	AUG.		1	296	70	
AMERICAN PLAICE	3L	MAR.	3	155	81.5	75 26-54 cm
		NOV.	2	166	186	
		SEP.	3	617	281	
		OCT.	3	382	243	
		NOV.	6	506	600	
		DEC.	6	601	600	
YELLOWTAIL FLounder	3W	SEP.	14	3174	904	
		OCT.	1	247	77	
GREENLAND HALIBUT	3L	MAY	5	456	437	
		JUN.	6	354	353	
3N	3W	AUG.	8	852	765	
		SEP.	4	523	385	
		OCT.	1	125	100	
		NOV.	4	530	400	
		DEC.	6	736	1342	

B- SIDE TRawl

SPECIES	DIV.	MONTH	No OF SAMPLES	No FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS No LENGTH RANGE
COD	3L	FEB.	8	1324	920	111 30-108 cm
		MAR.	11	1407	837	158 27-100 cm
		APR.	8	829	571	155 30-91 cm
		MAY	3	186	217.3	106 30-106 cm
		JUN.	9	1069	920	205 28-85 cm
	3M	SEP.	7	268	417.362	182 20-74 cm
		OCT.	7	187	398.082	119 27-77 cm
		NOV.	1	19	36.043	19 43-78 cm
	3N	APR.	4	486	385	90 27-87 cm
		JUN.	3	92	174	69 35-130 cm
		OCT.	16	2754	788.715	190 19-122 cm
		NOV.	2	52	34.302	52 26-67 cm
		DEC.	1	18	16.304	18 28-83 cm
REDFISH	3L	APR.	2	184	50	
		MAY	3	346	74	
	3M	APR.	3	461	162	
		MAY	8	1074	394	
		SEP.	9	2181	890.6	
		OCT.	10	2253	864.7	
		NOV.	15	3834	1533.3	
	3N	FEB.	1	238	61	
		MAR.	2	342	104	
		APR.	3	374	127	
		MAY	2	294	122	
		JUN.	4	689	139	
		OCT.	7	1358	293	
		NOV.	2	341	78.6	
		DEC.	7	1442	430.5	
	3O	OCT.	2	502	158.5	
AMERICAN PLAICE	3M	SEP.	1	13	12.6	13 32-50 cm
		OCT.	2	16	19.281	16 37-54 cm
	3N	OCT.	17	1817	597.608	397 15-70 cm
		NOV.	16	1325	492.016	348 16-66 cm
		DEC.	1	48	20.604	48 20-60 cm
YELLOWTAIL FLounder	3N	OCT.	2	121	28.461	121 16-46 cm
GREENLAND HALIBUT	3M	OCT.	2	54	59.8	

C- GILLNETS

SPECIES	DIV.	MONTH	NO OF SAMPLES	NO FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS NO LENGTH RANGE
COD	3M	MAY	18	2828	7175	254 38-129 cm
		JUN.	29	4237	13667	323 33-138 cm
		JUL.	38	6188	19157	310 45-132 cm
		AUG.	25	5500	14300	261 43-118 cm
		OCT.	22	4447	11379.8	315 33-119 cm
		NOV.	30	8205	20977.9	338 30-126 cm
		DEC.	5	1495	3328.8	174 38-108 cm
Haddock	3N	MAY	3	9	183	9 101-139 cm
		JUL.	16	1452	15487.3	258 61-135 cm
		AUG.	14	1389	14781.5	266 72-135 cm
		SEP.	18	770	8141	246 65-135 cm
SCALLOP	30	MAY	12	1445	12783.7	304 67-138 cm
		JUN.	19	2946	21291.9	342 48-134 cm
		JUL.	5	510	5042.3	259 55-133 cm
		AUG.	9	477	5321.5	215 73-135 cm
REDFISH	3H	MAY	8	1858	1432	
		JUN.	4	436	509	
		JUL.	3	395	321	
		OCT.	3	520	419	
		NOV.	16	1950	1873.75	
		DEC.	3	174	197	
AMERICAN PLAICE	3M	MAY	1	79	63.5	74 27-59 cm
		JUN.	1	131	98	67 27-55 cm
		OCT.	5	97	94.5	88 26-58 cm
		NOV.	20	631	540.3	174 25-57 cm
		DEC.	3	62	50.7	62 27-51 cm
LAWAVER	3N	MAY	4	108	107.736	97 28-68 cm
		JUL.	16	1041	770.015	257 30-69 cm
		AUG.	14	718	563.736	250 28-68 cm
		SEP.	16	374	404.294	234 30-72 cm
SCALLOP	30	MAY	9	877	530.586	245 28-67 cm
		JUN.	17	1645	1168.227	238 28-74 cm
		JUL.	5	370	284.456	213 30-68 cm
		AUG.	9	385	279.127	187 29-72 cm
YELLOWTAIL FLOUNDER	3N	MAY	4	66	26.805	62 29-51 cm
		JUL.	16	923	481.285	189 27-53 cm
		AUG.	13	861	380.022	170 26-51 cm
		SEP.	16	339	173.37	153 25-54 cm
SCALLOP	30	JUN.	3	38	22.632	37 30-44 cm
		JUL.	4	166	85.223	107 28-45 cm
		AUG.	8	191	111.463	123 29-49 cm
WITCH FLOUNDER	30	JUN.	16	774	596.904	182 32-58 cm

TABLE IV - A : Portuguese stern trawl fisheries (from 2 vessels sampled): directed effort, cpue and by-catch by month and division, for 1991.

DIVISION	MONTH	GEAR	TARGET SPECIES	DIRECTED EFFORT	FISHING DAYS	NUMBER HAULS	C.P.U.E. (ton/hour)	MAIN BY-CATCH SPECIES	MEAN BY-CATCH (%) MAIN SPECIES	TOTAL
3L	FEB.	OT6	COD	72h	7	32	2.256	RED-FISH	6.3	8.2
3L	MAR.	OT6	COD	314h	23	139	1.073	G.HALIBUT	7.3	20.3
3L	MAR.	OT6	AN.PLACE	16h	1	7	0.137	COD	33.6	82.2
3L	MAR.	OT6	G.HALIBUT	71h	5	25	0.512	COD	24.3	36.7
3L	APR.	OT6	COD	275h	20	117	0.025	SKATE	7.5	20.6
3L	APR.	OT6	AN.PLACE	12h	1	5	0.280	SKATE	66.0	79.9
3L	MAY	OT6	COD	33h	3	17	0.100	G.HALIBUT	34.5	83.1
3L	MAY	OT6	G.HALIBUT	380h	24	117	0.480	SKATE	14.4	26.2
3L	JUN.	OT6	COD	112h	8	39	0.905	SKATE	11.3	22.1
3L	JUN.	OT6	G.HALIBUT	88h	5	23	0.417	SKATE	3.3	6.2
3L	AUG.	OT6	RED-FISH	8h	1	4	0.424	G.HALIBUT	8.8	12.6
3L	SEP.	OT6	RED-FISH	31h	3	15	0.232	G.HALIBUT	10.7	17.6
3L	OCT.	OT6	RED-FISH	180h	11	71	0.671	G.HALIBUT	2.0	6.0
3L	NOV.	OT6	RED-FISH	58h	6	25	0.601	SKATE	2.2	3.2
3L	DEC.	OT6	RED-FISH	3h	1	1	0.000	AN.PLACE	11.8	22.2
3M	APR.	OT6	RED-FISH	63h	5	27	1.344	COD	1.0	1.2
3M	MAY	OT6	RED-FISH	27h	2	10	0.683	G.HALIBUT	3.0	9.3
3M	SKATE								4.1	9.3
3M	AUG.	OT6	RED-FISH	82h	5	19	0.691	COD	6.9	13.9
3M	SEP.	OT6	RED-FISH	38h	2	10	0.483	COD	11.8	18.1
3M	OCT.	OT6	RED-FISH	180h	8	65	0.383	COD	8.2	15.4
3M	NOV.	OT6	COD	23h	2	8	0.648	RED-FISH	41.7	48.7
3M	NOV.	OT6	RED-FISH	286h	18	97	0.694	COD	8.3	15.0
3M	DEC.	OT6	RED-FISH	95h	7	36	0.502	COD	8.4	14.2
3M	APR.	OT6	COD	8h	1	6	0.458	SKATE	37.1	50.0
3M	APR.	OT6	RED-FISH	35h	3	18	0.231	SKATE	58.0	78.0
3M	AUG.	OT6	RED-FISH	141h	10	58	0.314	G.HALIBUT	25.3	48.2
3M	AUG.	OT6	G.HALIBUT	70h	5	29	0.238	RED-FISH	24.8	45.8
3M	SEP.	OT6	COD	22h	1	5	0.438	AN.PLACE	57.5	57.5
3M	SEP.	OT6	RED-FISH	128h	8	48	0.355	SKATE	21.1	41.9
3M	SEP.	OT6	AN.PLACE	88h	4	19	0.423	COD	26.0	35.0
3M	SEP.	OT6	YEL.FL.	233h	13	54	0.724	COD	5.5	9.3
3M	OCT.	OT6	COD	47h	3	12	0.240	AN.PLACE	15.8	30.0
3M	OCT.	OT6	RED-FISH	61h	3	13	0.209	SKATE	10.3	44.8
3M	OCT.	OT6	YEL.FL.	10h	1	4	0.109	COD	42.7	62.7
3M	NOV.	OT6	COD	16h	1	6	0.195	AN.PLACE	44.5	68.8
3M	NOV.	OT6	RED-FISH	28h	2	12	0.117	G.HALIBUT	19.4	83.8
3M	NOV.	OT6	AN.PLACE	93h	5	35	0.286	COD	14.5	55.0
3M	DEC.	OT6	RED-FISH	23h	2	9	0.091	G.HALIBUT	26.1	88.7
3M	DEC.	OT6	G.HALIBUT	9h	1	3	0.091	RED-FISH	30.1	64.8
3M	DEC.	OT6	AN.PLACE	89h	8	36	0.306	SKATE	16.0	49.4
30	AUG.	OT6	RED-FISH	8h	1	4	0.787	SKATE	3.1	6.9

TABLE IV - B : Portuguese side trawl fisheries (from 2 vessels sampled): directed effort, cpue and by-catch by month and division, for 1981.

DIVISION	MONTH	GEAR	TARGET SPECIES	DIRECTED EFFORT	FISHING DAYS	NUMBER HAULS	C.P.U.E. (ton/hour)	MAIN BY-CATCH SPECIES	MEAN BY-CATCH MAIN SPECIES	TOTAL
3L	FEB.	OT6	COD	100h	11	46	1.637	SKATE	9.7	14.9
3L	MAR.	OT6	COD	146h	12	59	0.899	SKATE	14.8	24.7
3L	APR.	OT6	COD	147h	10	58	0.382	SKATE	29.6	53.4
3L	MAY	OT6	COD	14h	1	7	0.483	SKATE	27.2	53.8
3L	MAY	OT6	RED-FISH	134h	9	58	0.200	SKATE	43.5	70.0
3L	MAY	OT6	G.HALIBUT	47h	3	21	0.126	SKATE	36.4	77.0
3L	JUN.	OT6	COD	354h	21	116	0.418	SKATE	18.6	40.8
3L	JUN.	OT6	RED-FISH	14h	1	6	0.566	SKATE	29.1	63.1
3M	APR.	OT6	RED-FISH	40h	4	20	1.398	SKATE	1.5	3.2
3M	MAY	OT6	RED-FISH	109h	10	51	0.552	SKATE	9.4	16.7
3M	MAY	OT6	G.HALIBUT	7h	1	2	0.098	SKATE	49.0	67.9
3M	SEP.	OT6	RED-FISH	121h	7	35	0.300	COD	5.2	16.2
3M	OCT.	OT6	RED-FISH	144h	8	41	0.268	COD	5.6	16.5
3M	NOV.	OT6	RED-FISH	254h	16	79	0.655	SKATE	1.2	4.6
3N	FEB.	OT6	COD	24h	2	11	0.269	SKATE	41.4	72.6
3N	MAR.	OT6	RED-FISH	7h	1	4	0.457	COD	9.2	11.0
3N	MAR.	OT6	AM.PLACE	19h	2	10	0.113	SKATE	72.8	89.0
3N	MAR.	OT6	G.HALIBUT	11h	1	6	0.115	SKATE	69.5	89.9
3N	APR.	OT6	COD	6h	5	27	0.198	SKATE	39.5	68.1
3N	APR.	OT6	RED-FISH	38h	3	17	0.305	SKATE	41.6	63.0
3N	APR.	OT6	AM.PLACE	13h	1	5	0.108	SKATE	62.0	86.7
3N	APR.	OT6	G.HALIBUT	16h	1	6	0.107	SKATE	77.4	86.7
3N	MAY	OT6	RED-FISH	48h	4	18	0.448	SKATE	24.9	49.1
3N	MAY	OT6	AM.PLACE	15h	1	6	0.128	RED-FISH	18.5	25.0
3N	MAY	OT6	YEL.FL.	50h	3	17	0.295	-	-	-
3N	JUN.	OT6	COD	8h	1	2	0.049	RED-FISH	40.1	53.1
3N	JUN.	OT6	RED-FISH	82h	5	21	0.147	SKATE	14.3	42.9
3N	OCT.	OT6	COD	157h	9	45	0.406	AM.PLACE	15.5	27.1
3N	OCT.	OT6	RED-FISH	11h	1	4	0.336	AM.PLACE	29.2	48.6
3N	OCT.	OT6	AM.PLACE	105h	7	39	0.511	RED-FISH	17.2	35.9
3N	NOV.	OT6	COD	33h	2	10	0.178	AM.PLACE	34.6	67.1
3N	NOV.	OT6	RED-FISH	41h	3	17	0.150	AM.PLACE	20.3	51.8
3N	NOV.	OT6	AM.PLACE	182h	12	73	0.268	RED-FISH	12.6	46.5
3N	DEC.	OT6	RED-FISH	49h	4	24	0.415	G.HALIBUT	6.3	18.6
3N	DEC.	OT6	AM.PLACE	16h	1	8	0.235	RED-FISH	1.6	3.4
30	OCT.	OT6	RED-FISH	11h	1	5	0.503	G.HALIBUT	3.6	12.8

TABLE IV - C : Portuguese gillnet fishery (from three trips sampled): directed effort, cpue and by-catch by month and division, for 1991.

DIVISION	MONTH	GEAR	TARGET SPECIES	DIRECTED EFFORT(1)	FISHING DAYS	NUMBER SETS	C.P.U.E (kg/net/day)	MAIN BY-CATCH SPECIES	MEAN BY-CATCH (\$) MAIN SPECIES	TOTAL
3N	MAY	GN6	COD	6467	22	22	7.655	RED-FISH	24.0	28.4
3N	JUN.	GN6	COD	9865	25	25	8.617	RED-FISH	8.4	15.2
3N	JUL.	GN6	COD	11971	25	25	10.666	RED-FISH	2.9	7.6
3N	AUG.	GN6	COD	10315	16	16	10.878	AM.PLACE	0.7	1.3
3N	OCT.	GN6	COD	10440	24	22	5.915	G.HALIBUT	2.1	5.7
3N	NOV.	GN6	COD	10800	28	28	7.931	G.HALIBUT	6.8	14.7
3N	DEC.	GN6	COD	1800	6	5	12.778	RED-FISH	3.1	6.8
3N	MAY	GN6	COD	960	4	4	0.191	SKATE	19.4	85.0
3N	JUL.	GN6	COD	6000	17	16	11.970	AM.PLACE	2.9	6.3
3N	AUG.	GN6	COD	6400	17	14	11.278	MONKFISH	1.8	6.3
3N	SEP.	GN6	COD	7800	24	18	5.585	SKATE	3.6	11.3
30	MAY	GN6	COD	4800	16	12	6.737	AM.PLACE	8.4	9.1
30	JUN.	GN6	COD	11040	30	20	19.183	RED HAKE	4.8	12.1
30	JUL.	GN6	COD	2720	7	5	12.176	RED HAKE	7.3	12.1
30	AUG.	GN6	COD	3960	11	10	5.384	AM.PLACE	1.0	11.5

(1) sum number of nets per fishing day.

TABLE V - A : Portuguese red-fish stern trawl fisheries (from 2 vessels sampled): directed effort, cpue and by-catch above and below 400m depth line, by month and division, for 1991.

DIVISION	MONTH	GEAR	DEPTH	TARGET SPECIES	DIRECTED EFFORT	FISHING DAYS	NUMBER HAULS	C.P.U.E. (ton/hour)	MAIN BY-CATCH SPECIES	MEAN BY-CATCH (%) MAIN SPECIES	MEAN BY-CATCH (%) TOTAL
3L	SEP.	OT6	>400	RED-FISH	11h	1	5	0.258	SKATE	17.8	22.0
3L	OCT.	OT6	>400	RED-FISH	11h	3	54	0.641	G.HALIBUT	2.3	3.3
3L	OCT.	OT6	<400	RED-FISH	10h	2	10	0.056	SKATE	4.0	7.3
3L	NOV.	OT6	>400	RED-FISH	25h	2	11	0.676	SKATE	1.3	1.9
3N	APR.	OT6	>400	RED-FISH	83h	5	27	1.344	COD	1.0	1.2
3N	MAY	OT6	>400	RED-FISH	29h	2	10	0.603	G.HALIBUT	3.0	9.3
3N									SKATE	4.1	9.3
3N	AUG.	OT6	<400	RED-FISH	82h	4	15	0.588	COD	6.8	13.9
3N	SEP.	OT6	<400	RED-FISH	38h	2	10	0.063	COD	11.6	16.1
3N	OCT.	OT6	<400	RED-FISH	160h	9	45	0.393	COD	0.2	15.4
3N	NOV.	OT6	>400	RED-FISH	51h	3	19	0.005	SKATE	0.7	0.7
3N	NOV.	OT6	<400	RED-FISH	114h	7	35	0.638	COD	13.8	18.6
3N	DEC.	OT6	<400	RED-FISH	53h	4	20	0.724	COD	9.1	15.4
3N	APR.	OT6	>400	RED-FISH	23h	2	12	0.300	SKATE	58.0	70.0
3N	AUG.	OT6	>400	RED-FISH	120h	8	48	0.278	G.HALIBUT	29.7	56.7
3N	SEP.	OT6	>400	RED-FISH	16h	1	7	0.254	SKATE	30.4	43.7
3N	DEC.	OT6	>400	RED-FISH	9h	1	3	0.078	G.HALIBUT	35.2	68.0

TABLE V - B : Portuguese red-fish wide trawl fisheries (from 2 vessels sampled): directed effort, cpue and by-catch above and below 400m depth line, by month and division, for 1991.

DIVISION	MONTH	GEAR	DEPTH	TARGET SPECIES	DIRECTED EFFORT	FISHING DAYS	NUMBER HAULS	C.P.U.E. (ton/hour)	MAIN BY-CATCH SPECIES	MEAN BY-CATCH (%) MAIN SPECIES	MEAN BY-CATCH (%) TOTAL
3L	MAY	OT6	>400	RED-FISH	106h	7	45	0.180	SKATE	48.3	72.4
3L	JUN.	OT6	<400	RED-FISH	14h	1	6	0.566	SKATE	20.1	63.1
3N	APR.	OT6	>400	RED-FISH	33h	3	18	1.479	SKATE	1.0	3.0
3N	MAY	OT6	>400	RED-FISH	91h	8	42	0.516	SKATE	11.7	20.7
3N	SEP.	OT6	>400	RED-FISH	30h	2	9	0.332	SKATE	0.9	2.3
3N	SEP.	OT6	<400	RED-FISH	80h	3	18	0.258	COD	11.0	22.4
3N	OCT.	OT6	<400	RED-FISH	56h	3	13	0.156	COD	12.3	25.6
3N	NOV.	OT6	>400	RED-FISH	50h	3	17	0.044	SKATE	1.1	2.6
3N	NOV.	OT6	<400	RED-FISH	55h	4	18	0.420	COD	3.3	9.5
3N	APR.	OT6	>400	RED-FISH	10h	1	5	0.180	COD	20.9	43.6
3N	MAY	OT6	>400	RED-FISH	27h	2	10	0.703	SKATE	22.5	33.4
3N	JUN.	OT6	<400	RED-FISH	65h	4	16	0.149	COD	22.8	42.0
3N	DEC.	OT6	>400	RED-FISH	10h	2	10	0.587	G.HALIBUT	7.8	17.0
30	OCT.	OT6	>400	RED-FISH	11h	1	5	0.503	G.HALIBUT	3.6	12.8

TABLE V-C: Portuguese red-fish trawl fishery (from 2 stern trawlers and 2 side trawlers sampled): mean by-catch (%) of cod, above and below the 400m depth line by month in Div. 3W, for 1981.

DEPTH / MONTH	APR.	MAY	AUG.	SEP.	OCT.	NOV.	DEC.	MEAN(%)
> 400	1.0	0.2		0.0		0.1		0.40
< 400			6.8	11.2	9.2	10.0	9.1	9.45

Note (*) weighted by the number of fishing days in each month.

TABLE V - D : Portuguese cod stern trawl fisheries (from 2 vessels sampled): directed effort, cpue and by-catch above and below the 400m depth line, by month and division, for 1981.

DIVISION	MONTH	GEAR	DEPTH	TARGET SPECIES	DIRECTED EFFORT	FISHING DAYS	NUMBER HAULS	C.P.U.E. (ton/hour)	MAIN SPECIES	MEAN BY-CATCH (%)	TOTAL
3L	FEB.	OT6	>400	COD	39h	4	17	3.152	RED-FISH	1.0	1.7
3L	MAR.	OT6	>400	COD	135h	10	58	1.359	G.HALIBUT	14.7	23.1
3L	MAR.	OT6	<400	COD	44h	3	18	0.707	SKATE	6.6	15.5
3L	APR.	OT6	>400	COD	188h	12	74	0.633	SKATE	9.3	27.3
3L	APR.	OT6	<400	COD	53h	4	20	1.419	SKATE	5.5	11.3
3L	MAY	OT6	>400	COD	33h	3	17	0.180	G.HALIBUT	30.5	63.1
3L	JUN.	OT6	<400	COD	79h	6	26	0.002	SKATE	12.5	23.8
3L	DEC.	OT6	<400	COD	3h	1	1	0.090	AM.PLACE	11.0	22.2
3W	NOV.	OT6	<400	COD	23h	2	6	0.448	RED-FISH	41.7	48.7
3W	APR.	OT6	>400	COD	9h	1	4	0.450	SKATE	37.1	50.0
3W	SEP.	OT6	<400	COD	22h	1	5	0.430	AM.PLACE	57.5	57.5
3W	OCT.	OT6	<400	COD	30h	2	7	0.213	YEL. FL.	28.6	38.1

TABLE V - E : Portuguese cod side trawl fisheries (from 2 vessels sampled): directed effort, cpue and by-catch above and below the 400m depth line, by month and division, for 1981.

DIVISION	MONTH	GEAR	DEPTH	TARGET SPECIES	DIRECTED EFFORT	FISHING DAYS	NUMBER HAULS	C.P.U.E. (ton/hour)	MAIN SPECIES	MEAN BY-CATCH (%)	TOTAL
3L	FEB.	OT6	>400	COD	100h	11	44	1.837	SKATE	9.7	14.9
3L	MAR.	OT6	>400	COD	39h	3	15	0.904	SKATE	21.3	35.7
3L	APR.	OT6	>400	COD	82h	6	39	0.311	SKATE	38.4	65.8
3L	APR.	OT6	<400	COD	15h	1	4	0.832	SKATE	22.2	34.7
3L	MAY	OT6	>400	COD	14h	1	7	0.683	SKATE	27.2	53.8
3L	JUN.	OT6	<400	COD	306h	18	95	0.450	SKATE	19.4	37.4
3W	FEB.	OT6	>400	COD	12h	1	5	0.292	SKATE	60.8	69.2
3W	APR.	OT6	>400	COD	6h	5	27	0.190	SKATE	39.5	88.1
3W	JUN.	OT6	<400	COD	8h	1	2	0.049	RED-FISH	40.1	53.1
3W	OCT.	OT6	<400	COD	157h	9	45	0.006	AM.PLACE	15.5	27.1
3W	NOV.	OT6	<400	COD	33h	2	10	0.178	AM.PLACE	34.6	87.1

TABLE VI - A : Portuguese stern trawl fisheries (from 2 vessels sampled):
 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 1981.

DIVISION	TARGET	MONTH	C.P.U.E.	SEX RATIO	C.P.U.E. (number/hour)			
			(ton/hour)		(kg)	males	females	total
3L	COD	FEB.	2.258	0.789				2824
3L	COD	MAR.	1.873	0.788				2377
3L	COD	APR.	0.825	0.641				1287
3L	COD	MAY	0.180	0.874				208
3L	COD	JUN.	0.905	0.900				1008
3L	RED-FISH	AUG.	0.424	0.747	0.304	173	395	568
3L	RED-FISH	SEP.	0.232	0.382	0.168	102	505	607
3L	RED-FISH	OCT.	0.671	0.314	0.158	337	1800	2137
3L	RED-FISH	NOV.	0.601	0.289	0.188	350	1730	2080
3L	AN.PLACE	MAR.	0.137	0.622	0.349	77	143	220
3L	G.HALIBUT	MAY	0.480	0.922	0.468	243	277	521
3L	G.HALIBUT	JUN.	0.417	0.975	0.483	206	221	428
3N	COD	NOV.	0.448	0.584				789
3N	RED-FISH	APR.	1.344	0.444	0.430	1300	1727	3027
3N	RED-FISH	MAY	0.683	0.390	0.442	775	977	1751
3N	RED-FISH	AUG.	0.481	0.386	0.304	378	664	1240
3N	RED-FISH	SEP.	0.463	0.420	0.522	575	527	1102
3N	RED-FISH	OCT.	0.393	0.355	0.498	551	556	1107
3N	RED-FISH	NOV.	0.694	0.388	0.493	927	954	1881
3N	RED-FISH	DEC.	0.562	0.284	0.481	913	1086	1979
3N	COD	APR.	0.456	0.638				720
3N	COD	SEP.	0.438	0.385				1138
3N	COD	OCT.	0.240	0.245				880
3N	COD	NOV.	0.195	0.711				274
3N	RED-FISH	APR.	0.231	0.358	0.348	224	421	645
3N	RED-FISH	AUG.	0.314	0.401	0.285	231	552	783
3N	RED-FISH	SEP.	0.355	0.338	0.259	272	779	1050
3N	RED-FISH	OCT.	0.299	0.257	0.303	445	718	1163
3N	RED-FISH	NOV.	0.117	0.210	0.410	220	329	557
3N	RED-FISH	DEC.	0.091	0.298	0.415	128	180	307
3N	AN.PLACE	SEP.	0.423	0.464	0.273	248	883	912
3N	AN.PLACE	NOV.	0.286	0.418	0.403	275	408	684
3N	AN.PLACE	DEC.	0.306	0.622	0.349	171	321	492
3N	YEL.FL.	SEP.	0.724	0.405	0.337	602	1185	1708
3N	YEL.FL.	OCT.	0.108	0.390	0.330	82	187	279
3N	G.HALIBUT	DEC.	0.091	0.684	0.224	31	108	137
30	RED-FISH	AUG.	0.167	0.401	0.295	584	1349	1813

TABLE VI - 8 : Portuguese side trawl fisheries (from 2 vessels sampled):
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 1981.

DIVISION	TARGET	MONTH	C.P.U.E. (ton/hour)	MEAN WEIGHT (kg)	SEX RATIO	C.P.U.E (number/hour)		
						males	females	total
3L	COD	FEB.	1.837	0.799				2040
3L	COD	MAR.	0.999	0.708				1141
3L	COD	APR.	0.382	0.641				586
3L	COD	MAY	0.483	0.874				553
3L	COD	JUN.	0.410	0.900				484
3L	RED-FISH	MAY	0.200	0.263	0.132	100	660	760
3L	G.HALIBUT	MAY	0.128	0.922	0.488	64	73	137
3N	RED-FISH	APR.	1.388	0.484	0.430	1352	1798	3140
3N	RED-FISH	MAY	0.552	0.390	0.462	626	789	1415
3N	RED-FISH	SEP.	0.300	0.420	0.522	373	342	714
3N	RED-FISH	OCT.	0.288	0.355	0.488	376	378	755
3N	RED-FISH	NOV.	0.855	0.369	0.493	875	900	1775
3N	COD	APR.	0.188	0.636				311
3N	COD	JUN.	0.049	1.079				26
3N	COD	OCT.	0.406	0.245				1857
3N	COD	NOV.	0.170	0.711				250
3N	RED-FISH	MAR.	0.457	0.282	0.377	811	1009	1821
3N	RED-FISH	APR.	0.305	0.358	0.348	298	558	852
3N	RED-FISH	MAY	0.448	0.621	0.283	301	783	1084
3N	RED-FISH	JUN.	0.147	0.160	0.414	362	513	875
3N	RED-FISH	OCT.	0.338	0.257	0.383	501	607	1307
3N	RED-FISH	NOV.	0.150	0.210	0.410	293	422	714
3N	RED-FISH	DEC.	0.415	0.288	0.415	502	620	1422
3N	AN.PLAINCE	OCT.	0.511	0.324	0.381	600	977	1577
3N	AN.PLAINCE	NOV.	0.268	0.618	0.403	258	383	641
3N	AN.PLAINCE	DEC.	0.235	0.622	0.348	132	246	378
30	RED-FISH	OCT.	0.503	0.257	0.383	749	1208	1957

TABLE VII-A: COD, 1991: cpue in number at age per hour, for the portuguese trawl fishery.

DIVISION	TARGET	GEAR	MONTH	AGE																
				SPECIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
3L	COD	STERN	FEB.	0.0	3.7	210.9	821.4	1110.0	532.9	64.1	19.3	20.9	21.0	5.6	2.8	0.4	0.8	2.8	0.0	0.0
3L	COD	STERN	MAR.	0.0	15.4	345.5	781.2	730.6	338.7	53.0	19.3	22.8	32.6	15.6	11.1	2.5	0.8	1.2	0.4	0.0
3L	COD	STERN	APR.	0.0	16.6	239.8	523.9	384.1	103.3	12.6	10.2	9.7	4.2	2.1	0.3	0.2	0.0	0.2	0.0	0.0
3L	COD	STERN	MAY	0.0	1.2	26.0	75.7	60.6	10.0	2.6	6.1	4.3	2.5	1.1	0.9	0.0	0.1	0.6	0.0	0.0
3L	COD	STERN	JUN.	0.0	3.5	70.5	205.6	415.8	164.3	21.0	14.7	11.5	6.4	2.6	0.4	0.0	0.0	0.0	0.0	0.0
3N	COD	STERN	NOV.	2.7	87.1	520.2	87.3	80.4	10.8	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3N	COD	STERN	APR.	0.0	6.6	107.5	465.4	113.2	17.0	3.5	1.4	1.8	0.9	1.2	0.6	0.0	0.0	0.0	0.0	0.0
3N	COD	STERN	SEP.	0.0	946.2	112.1	40.4	17.9	4.7	3.0	0.0	2.9	2.9	0.0	3.6	0.0	0.0	0.0	3.6	0.0
3N	COD	STERN	OCT.	6.7	847.0	100.1	15.0	8.7	2.0	0.5	0.3	0.2	0.2	0.0	0.0	0.1	0.0	0.0	0.2	0.3
3N	COD	STERN	NOV.	0.0	66.0	88.5	78.0	36.1	5.7	0.4	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3L	COD	SIDE	FEB.	0.0	2.7	153.0	598.0	811.2	386.7	46.5	14.0	15.2	15.3	4.1	2.0	0.3	0.0	2.1	0.0	0.0
3L	COD	SIDE	MAR.	0.0	7.4	185.8	375.0	353.5	162.6	25.4	9.5	10.8	15.7	7.5	5.3	1.2	0.6	0.6	0.2	0.0
3L	COD	SIDE	APR.	0.0	7.6	111.0	242.6	160.6	67.0	5.0	4.7	4.5	2.0	1.0	0.1	0.1	0.0	0.1	0.0	0.0
3L	COD	SIDE	MAY	0.0	3.2	69.0	203.1	184.3	51.0	7.0	10.9	11.5	6.7	2.9	2.5	0.0	0.2	0.0	0.0	0.0
3L	COD	SIDE	JUN.	0.0	1.6	38.7	131.7	181.7	75.8	10.1	6.8	5.3	2.9	1.2	0.2	0.0	0.0	0.0	0.0	0.0
3N	COD	SIDE	APR.	0.0	2.9	46.6	201.0	40.9	7.7	-1.5	0.6	0.8	0.4	0.5	0.3	0.0	0.0	0.0	0.8	0.0
3N	COD	SIDE	JUN.	0.0	0.0	0.2	2.5	13.7	8.6	0.6	0.3	1.0	0.4	0.2	0.2	0.0	0.0	0.2	0.0	0.0
3N	COD	SIDE	OCT.	11.4	1432.2	169.2	28.7	11.3	3.4	0.0	0.4	0.3	0.3	0.0	0.0	0.2	0.0	0.0	0.3	0.4
3N	COD	SIDE	NOV.	0.0	60.3	80.7	71.1	31.2	5.2	0.4	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE VII-B: RED-FISH, DIVISION 3N, 1991: cpue in number at age per hour, for the portuguese trawl fishery.

DIVISION	TARGET	SEX	MONTH	GEAR	AGE														
					SPECIES	5	6	7	8	9	10	11	12	13	14	15	16	17	
3N	RED-FISH	MALE	APR.	STERN	15.0	24.0	81.4	267.8	243.5	122.4	98.4	98.1	66.7	79.1	97.2	105.8			
3N	RED-FISH	MALE	MAY	STERN	5.5	23.5	99.0	216.4	164.0	88.7	45.3	38.7	26.2	30.8	35.1	41.0			
3N	RED-FISH	MALE	AUG.	STERN	0.4	3.0	33.5	125.5	114.1	40.4	14.8	14.9	8.6	7.9	8.2	7.3			
3N	RED-FISH	MALE	SEP.	STERN	1.0	8.5	32.0	120.2	150.0	78.5	51.1	27.9	18.8	23.3	25.0	31.2			
3N	RED-FISH	MALE	OCT.	STERN	0.6	5.1	65.3	170.2	143.8	62.1	40.5	18.8	12.0	11.8	10.2	11.1			
3N	RED-FISH	MALE	NOV.	STERN	3.8	14.4	95.4	253.6	235.8	116.1	80.4	61.1	25.6	25.2	17.9	12.6			
3N	RED-FISH	MALE	DEC.	STERN	7.3	42.0	190.4	360.8	177.5	66.6	35.6	11.5	7.3	5.0	4.0	3.8			
3N	RED-FISH	FEMALE	APR.	STERN	151.2	170.3	88.9	201.8	170.0	152.2	97.1	166.5	128.8	121.6	55.0	237.7			
3N	RED-FISH	FEMALE	MAY	STERN	43.9	132.5	124.8	182.3	112.7	83.5	43.0	81.7	48.7	45.0	20.1	98.5			
3N	RED-FISH	FEMALE	AUG.	STERN	0.5	40.4	56.8	110.2	110.1	101.4	69.8	93.3	35.9	20.0	12.4	30.0			
3N	RED-FISH	FEMALE	SEP.	STERN	4.5	24.6	54.5	60.5	85.5	88.6	49.0	82.7	24.3	18.8	7.8	38.0			
3N	RED-FISH	FEMALE	OCT.	STERN	4.7	22.0	72.9	140.0	120.0	86.1	27.5	35.3	12.6	7.0	4.4	12.3			
3N	RED-FISH	FEMALE	NOV.	STERN	31.5	85.2	108.1	105.8	154.8	120.3	60.4	77.0	38.4	27.1	12.0	44.7			
3N	RED-FISH	FEMALE	DEC.	STERN	75.2	193.9	193.7	280.2	160.5	103.1	11.0	16.0	8.2	5.3	2.0	13.1			
3N	RED-FISH	MALE	APR.	SIDE	18.0	25.0	84.7	270.6	253.3	127.3	102.4	102.0	69.4	82.3	101.1	109.8			
3N	RED-FISH	MALE	MAY	SIDE	4.4	19.0	80.7	176.8	117.0	53.9	36.8	31.3	21.2	24.8	28.6	33.7			
3N	RED-FISH	MALE	SEP.	SIDE	1.1	5.5	21.1	77.8	101.1	49.5	33.1	18.1	12.0	15.1	18.7	20.2			
3N	RED-FISH	MALE	OCT.	SIDE	0.3	3.5	44.5	116.1	90.8	42.4	27.6	12.0	8.2	8.1	8.9	7.6			
3N	RED-FISH	MALE	NOV.	SIDE	3.0	13.6	80.1	230.3	222.5	109.8	75.0	30.0	24.2	23.0	18.8	16.7			
3N	RED-FISH	FEMALE	APR.	SIDE	157.3	177.2	90.4	209.7	185.2	150.3	101.0	152.4	136.0	126.5	57.3	247.3			
3N	RED-FISH	FEMALE	MAY	SIDE	35.5	107.1	100.7	131.1	91.1	67.5	34.7	49.8	39.3	36.3	18.2	70.6			
3N	RED-FISH	FEMALE	SEP.	SIDE	2.9	15.8	35.3	39.2	55.4	64.5	31.7	40.8	15.7	12.0	5.0	23.3			
3N	RED-FISH	FEMALE	OCT.	SIDE	3.2	15.5	48.7	85.5	81.8	65.5	18.8	26.1	18.8	4.8	3.0	0.6			
3N	RED-FISH	FEMALE	NOV.	SIDE	29.7	80.4	102.0	175.1	146.1	121.1	57.0	73.5	36.2	25.6	11.3	42.2			

TABLE VII - C: AMERICAN PLAICE, 1991: cpue in number at age per hour, for the portuguese trawl fishery.

DIVISION	TARGET	SEX	MONTH	GEAR	AGE																
					2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
3L	AM. PLAICE	MALE	MAR.	STERN	0.0	0.0	0.0	34.0	128.4	59.9	21.1	4.6	0.3	0.3	0.9	0.0	0.0	0.0	0.0		
3L	AM. PLAICE	MALE	MAR.	NOV.	0.0	0.0	0.2	35.0	21.4	9.2	1.9	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0		
3L	AM. PLAICE	MALE	DEC.	STERN	0.0	0.3	1.3	20.8	86.3	39.7	19.4	9.1	5.1	3.8	6.6	0.7	0.0	0.4	0.0		
3N	AM. PLAICE	MALE	SEP.	STERN	0.0	0.0	0.0	34.0	128.4	59.9	21.1	4.6	0.3	0.3	0.9	0.0	0.0	0.0	0.0		
3N	AM. PLAICE	MALE	NOV.	STERN	0.2	0.9	11.1	63.4	196.7	63.1	19.2	10.1	3.9	2.3	0.5	0.0	0.2	0.0	0.0		
3N	AM. PLAICE	MALE	DEC.	STERN	0.0	0.3	1.3	20.8	86.3	39.7	19.4	9.1	5.1	3.8	6.6	0.7	0.0	0.4	0.0		
3N	AM. PLAICE	FEMALE	MAR.	STERN	0.0	0.0	0.2	5.0	28.4	34.9	33.5	10.4	20.5	3.1	0.9	1.7	1.3	1.6	0.3		
3N	AM. PLAICE	FEMALE	NOV.	STERN	0.0	0.0	0.0	34.0	128.4	59.9	21.1	4.6	0.3	0.3	0.9	0.0	0.0	0.0	0.0		
3N	AM. PLAICE	FEMALE	DEC.	STERN	0.0	0.0	0.0	34.0	128.4	59.9	21.1	4.6	0.3	0.3	0.9	0.0	0.0	0.0	0.0		
3N	AM. PLAICE	MALE	OCT.	SIDE	1.3	39.2	73.9	183.0	205.9	53.0	22.0	11.3	4.3	3.3	0.9	1.2	0.0	0.1	0.0	0.0	
3N	AM. PLAICE	MALE	NOV.	SIDE	0.2	8.2	16.0	59.4	98.1	40.4	17.1	9.5	3.6	2.7	2.1	0.5	0.0	0.2	0.0	0.0	
3N	AM. PLAICE	MALE	DEC.	SIDE	0.0	0.2	1.0	16.0	49.4	30.5	14.9	7.0	3.9	2.9	5.1	0.5	0.0	0.3	0.0	0.0	
3N	AM. PLAICE	FEMALE	OCT.	SIDE	2.7	35.0	140.0	249.3	322.3	116.0	41.2	11.1	4.8	4.5	6.0	3.5	7.5	5.7	7.1	0.0	0.0
3N	AM. PLAICE	FEMALE	NOV.	SIDE	0.5	0.6	30.9	93.8	131.1	57.0	26.4	8.0	11.9	4.1	6.3	2.9	4.2	3.2	1.4	0.0	0.0
3N	AM. PLAICE	FEMALE	DEC.	SIDE	0.0	1.3	8.1	29.0	88.7	40.7	32.0	11.5	15.3	8.1	8.1	8.0	3.8	5.7	3.3	1.0	0.0

TABLE VIII-A: COD DIV.3L, 1991: length composition of the trawl catches.

LENGTH GROUP	FEBRUARY	MARCH	APRIL	MAY	JUNE	DEC=4thQ.	1st QUARTER	2nd QUARTER	TOTAL	LENGTH GROUP
21	0.0	1.5	0.0	0.0	0.0	28.6	0.9	0.0	0.5	21
24	1.7	7.8	6.8	0.0	0.9	100.0	5.3	4.4	4.9	24
27	4.0	24.8	33.0	0.9	9.8	85.7	16.3	23.6	19.4	27
30	18.2	66.2	108.9	76.7	33.7	171.4	46.7	79.6	60.7	30
33	101.1	125.1	211.2	154.0	88.8	85.7	115.3	163.4	135.8	33
36	133.9	173.4	181.9	134.3	136.5	14.3	157.3	163.5	159.8	36
39	175.9	150.8	119.0	220.3	123.9	57.1	161.0	123.7	145.1	39
42	167.6	127.5	88.0	75.9	135.7	57.1	143.9	105.7	127.6	42
45	127.3	92.7	79.9	73.7	121.2	0.0	106.8	85.4	101.9	45
48	110.4	68.1	57.7	71.9	92.4	28.6	85.3	71.2	79.3	48
51	64.4	56.9	38.8	42.9	71.9	42.9	60.0	51.5	56.3	51
54	38.3	24.4	21.7	38.7	58.0	28.6	30.1	35.1	32.2	54
57	18.2	21.6	14.3	12.4	52.5	71.4	20.2	28.7	23.8	57
60	12.5	13.4	12.0	12.7	32.1	0.0	13.0	19.6	15.8	60
63	7.1	7.2	7.1	4.1	17.7	57.1	7.1	11.0	8.8	63
66	4.6	7.9	5.1	3.5	10.2	57.1	6.6	7.0	6.8	66
69	7.6	8.0	3.9	16.6	5.1	14.3	7.8	4.6	6.5	69
72	2.5	5.4	4.6	8.6	4.2	42.9	4.2	4.5	4.4	72
75	1.5	5.6	1.7	20.5	3.6	42.9	4.0	2.9	3.5	75
78	0.7	4.0	1.4	5.4	2.6	0.0	2.7	1.9	2.4	78
81	1.0	2.5	1.1	3.3	0.3	14.3	1.9	0.9	1.5	81
84	0.0	1.3	0.9	0.3	0.0	0.0	0.8	0.5	0.7	84
87	0.0	1.0	0.5	0.0	0.0	0.0	0.6	0.3	0.5	87
90	0.0	0.6	0.3	0.0	0.0	0.0	0.4	0.2	0.3	90
93	0.0	0.8	0.2	8.9	0.8	0.0	0.4	0.7	0.5	93
96	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1	96
99	0.0	0.6	0.0	0.0	0.0	0.0	0.4	0.0	0.2	99
102	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	102
105	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	105
108	1.4	0.5	0.0	0.0	0.0	0.0	0.8	0.0	0.5	108
111	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	111
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
NO. SAMPLES	13	27	22	4	16	1	40	42	83	
SAMPLING WEIGHT(kg)	1505	2821	2081	324	1503	100	4328	3918	8344	
No.F.MEASURED	2102	3221	2769	269	1775	70	5323	4813	10208	
MEAN LENGTH(cm)	43.8	42.5	40.1	43.3	45.2	44.4	43.0	42.1	42.8	
MEAN WEIGHT (g)	789	788	641	874	900	1130	792	745	772	
DEPTH RANGE (m)	350/728	275/1140	220/663	250/647	229/908	250/315	275/1140	220/908	220/1140	

TABLE VIII-B: COD DIV.3M, 1981: length composition of the trawl catches.

LENGTH GROUP	AUG.	SEP.	OCT.	NOV.	DEC.	3rd QUARTER	4th QUARTER	TOTAL	LENGTH GROUP
18	0.0	10.5	0.0	0.0	0.0	6.8	0.0	1.0	18
21	1.8	52.7	0.0	0.0	0.0	34.4	0.0	5.2	21
24	1.8	49.2	0.0	17.5	0.0	32.2	14.1	16.0	24
27	12.1	10.5	0.3	23.0	0.0	11.1	18.6	17.5	27
30	33.8	17.6	0.0	97.2	0.0	23.4	78.4	70.1	30
33	7.9	12.1	0.0	157.1	0.0	10.6	126.8	109.3	33
36	11.6	12.0	6.0	183.8	0.0	11.9	149.3	128.6	36
39	9.7	20.7	13.3	198.8	0.0	16.8	162.6	140.7	39
42	21.1	29.4	39.2	176.0	0.0	26.5	148.6	130.2	42
45	6.1	33.0	51.3	84.2	0.0	23.3	80.3	54.7	45
48	16.3	74.2	98.4	6.6	13.5	53.4	22.1	26.8	48
51	52.0	108.7	121.4	9.3	27.0	88.3	28.4	37.4	51
54	122.1	151.1	185.7	26.4	175.7	140.7	58.9	69.5	54
57	151.7	95.3	147.2	16.3	297.3	115.6	45.6	56.1	57
60	186.2	111.1	107.6	9.2	243.2	138.1	31.8	47.8	60
63	156.8	75.9	105.2	6.5	148.6	105.0	26.7	38.5	63
66	74.2	56.6	27.2	4.2	40.5	62.9	9.0	17.1	66
69	86.5	55.9	70.4	1.2	40.5	66.9	13.8	21.8	69
72	20.4	23.3	13.9	0.5	0.0	22.3	2.7	5.6	72
75	12.1	0.0	4.7	0.0	0.0	4.4	0.8	1.3	75
78	6.6	0.0	5.2	1.8	13.5	2.4	2.7	2.8	78
81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81
84	0.0	0.0	3.0	0.2	0.0	0.0	0.7	0.6	84
87	4.8	0.0	0.0	0.0	0.0	1.7	0.0	0.3	87
90	4.2	0.0	0.0	0.0	0.0	1.5	0.0	0.2	90
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96
99	0.0	0.0	0.0	0.4	0.0	0.0	0.3	0.3	99
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	9	10	5	1	12	16	28	
SAMPLING WEIGHT(kg)	560	827	800	585	200	1187	1585	2772	
No.F.MEASURED	277	352	390	467	74	829	931	1560	
MEAN LENGTH(cm)	58.9	52.1	56.8	39.5	59.9	54.5	42.9	44.7	
MEAN WEIGHT (g)	1848	1465	1688	584	1918	1838	803	829	
DEPTH RANGE (m)	258/635	170/419	248/512	68/467	220/440	170/635	68/512	68/635	

TABLE VIII-C: COD DIV.3N, 1991: length composition of the trawl catches.

LENGTH GROUP	APR.	JUN.	SEP=3rdQ	OCT.	NOV.	DEC.	2nd QUARTER	4th QUARTER	TOTAL	LENGTH GROUP
18	0.0	0.0	0.0	1.6	0.0	0.0	0.0	1.4	1.2	18
21	0.0	0.0	5.0	33.8	0.0	1.6	0.0	31.2	25.9	21
24	0.0	0.0	147.3	191.0	7.3	2.4	0.0	176.5	161.6	24
27	9.2	0.0	375.2	338.2	42.2	40.5	8.9	315.0	302.9	27
30	65.6	0.0	239.6	274.0	88.1	73.9	62.7	259.1	244.2	30
33	168.0	9.0	93.6	94.3	111.8	89.8	161.9	95.2	99.2	33
36	217.3	0.0	47.1	28.3	102.2	107.6	207.6	34.2	46.9	36
39	164.3	27.1	41.1	13.4	148.1	179.2	158.2	24.5	35.1	39
42	131.0	29.9	5.1	9.1	171.5	155.3	128.5	21.5	26.1	42
45	113.7	41.8	9.0	3.5	93.9	163.7	110.5	12.0	17.9	45
48	51.5	91.9	8.9	3.2	96.9	83.6	53.3	10.2	12.8	48
51	23.2	254.9	4.4	1.6	73.2	33.2	33.5	6.4	7.9	51
54	15.7	151.4	4.4	2.7	21.9	27.9	21.8	4.3	5.4	54
57	10.2	136.3	0.5	2.0	21.9	18.9	15.8	3.5	3.9	57
60	10.5	106.4	4.1	0.4	4.5	5.0	14.7	0.7	2.0	60
63	3.5	11.8	0.2	0.4	0.0	7.3	3.9	0.5	0.7	63
66	7.5	43.4	0.0	1.0	7.3	0.0	9.1	1.4	1.7	66
69	0.6	11.5	0.0	0.3	4.5	2.2	1.1	0.5	0.5	69
72	3.5	11.5	3.2	0.3	0.0	3.0	3.9	0.3	0.9	72
75	0.6	9.0	5.0	0.0	0.0	2.2	1.0	0.0	0.7	75
78	1.9	20.5	0.0	0.0	0.0	0.0	2.7	0.0	0.2	78
81	0.6	0.0	0.0	0.7	0.0	2.6	0.6	0.7	0.6	81
84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84
87	0.6	22.9	0.0	0.0	0.0	0.0	1.6	0.0	0.1	87
90	0.0	11.5	0.0	0.0	4.5	0.0	0.5	0.3	0.2	90
93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93
96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99
102	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	102
105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105
108	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	108
111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	111
114	0.0	0.0	3.2	0.1	0.0	0.0	0.0	0.1	0.4	114
117	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	117
120	0.0	0.0	3.2	0.4	0.0	0.0	0.0	0.4	0.7	120
123	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	123
126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	126
129	0.0	9.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	129
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
NO. SAMPLES	4	3	5	20	3	6	7	29	41	
SAMPLING WEIGHT(kg)	385	174	322	1087	134	528	559	1747	2628	
NO.F.MEASURED	486	92	616	3387	148	620	578	4155	5349	
MEAN LENGTH(cm)	40.7	56.9	31.5	28.6	41.8	41.9	41.4	30.6	31.4	
MEAN WEIGHT (g)	636	1879	385	265	711	700	692	281	320	
DEPTH RANGE (m)	185/110	133/300	50/750	38/644	51/830	110/750	133/710	110/830	50/830	

TABLE VIII-D: COD DIV.3M, 1991: length composition of the gillnet catches.

LENGTH GROUP	MAY	JUN.	JUL.	AUG.	OCT.	NOV.	DEC.	2nd Q.	3rd Q.	4th Q.	TOTAL LENGTH GROUP
30	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0 30
33	0.0	1.1	0.0	0.0	0.9	0.5	0.0	0.6	0.0	0.5	0.3 33
36	1.3	2.9	0.0	0.0	0.5	0.5	0.3	2.2	0.0	0.5	0.7 36
39	0.6	1.2	0.0	0.0	3.8	1.2	0.3	0.9	0.0	2.0	1.0 39
42	0.6	4.1	0.0	0.3	2.8	1.2	1.9	2.7	0.1	1.9	1.4 42
45	2.8	1.6	0.2	0.8	4.4	4.4	6.1	2.1	0.4	4.7	2.4 45
48	4.7	1.2	1.6	1.2	6.8	3.8	6.2	2.7	1.5	5.3	3.1 48
51	12.5	7.1	10.7	13.7	32.2	18.0	25.9	9.3	11.9	24.2	15.7 51
54	35.3	11.2	45.8	45.8	127.8	86.8	116.4	21.2	45.7	105.8	61.4 54
57	81.9	30.2	107.7	124.3	212.4	198.2	214.1	51.7	114.3	205.6	131.8 57
60	148.5	102.7	189.0	221.2	234.0	252.9	237.4	121.8	201.8	243.9	197.2 60
63	213.5	177.9	211.9	236.9	148.8	192.2	182.3	192.7	221.8	175.2	197.7 63
66	188.6	202.2	147.0	154.1	92.7	107.1	95.7	196.6	149.8	100.3	143.4 66
69	146.9	185.7	108.5	96.2	41.1	52.1	48.6	169.8	103.8	47.7	89.7 69
72	88.6	115.7	66.5	47.3	29.2	23.4	30.1	103.6	58.9	28.5	58.2 72
75	35.7	57.3	37.5	22.8	20.0	19.8	18.0	48.3	31.7	18.6	31.4 75
78	13.1	26.5	21.4	11.9	12.7	12.3	6.9	20.9	17.6	11.6	16.3 78
81	4.7	12.6	8.1	3.8	8.9	6.9	8.0	9.3	8.4	7.8	7.6 81
84	5.7	10.7	7.1	4.4	3.8	4.8	0.7	8.6	6.0	3.8	5.9 84
87	2.3	8.4	5.0	2.8	2.3	1.9	0.7	5.9	4.1	1.9	3.7 87
90	4.5	11.5	6.8	4.1	2.9	2.5	0.0	8.5	5.7	2.3	5.2 90
93	2.1	6.3	6.2	1.7	3.3	2.4	0.0	4.5	4.4	2.4	3.7 93
96	2.4	6.6	5.4	2.3	1.4	1.0	0.0	4.9	4.1	1.0	3.2 96
99	2.3	4.2	5.2	1.8	1.7	1.4	0.0	3.4	3.7	1.3	2.8 99
102	1.1	3.3	2.6	0.4	0.8	2.0	0.3	2.4	1.7	1.2	1.7 102
105	0.3	2.7	2.4	0.7	1.5	1.2	0.0	1.7	1.7	1.1	1.5 105
108	0.8	2.0	1.5	0.5	1.9	0.7	0.0	1.5	1.1	1.0	1.2 108
111	0.3	1.6	1.5	0.8	0.4	0.2	0.0	1.0	1.2	0.2	0.8 111
114	0.5	0.4	0.6	0.3	0.9	0.4	0.0	0.4	0.5	0.5	0.5 114
117	0.0	0.6	0.1	0.3	0.2	0.0	0.0	0.4	0.2	0.1	0.2 117
120	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1 120
123	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 123
126	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0 126
129	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1 129
132	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0 132
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 135
138	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0 138
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
NO. SAMPLES	18	29	38	25	22	30	5	47	63	57	187
SAMPLING WEIGHT(kg)	7175	13667	19154	14300	11380	20978	3329	20842	33454	35887	89983
NO.F.MEASURED	2824	4237	6188	5500	4447	8205	1495	7081	11608	14147	32896
MEAN LENGTH(cm)	66.0	68.8	66.2	64.5	62.2	62.8	61.7	67.7	65.6	62.4	65.0
MEAN WEIGHT (g)	2638	3057	2709	2451	2225	2268	2120	2883	2608	2231	2539
DEPTH RANGE (m)	130/596	128/380	133/365	131/351	127/362	164/355	235/269	128/596	131/365	127/382	128/596

TABLE VIII-E: COD DIV.3NO, 1991: length composition of the gillnet catches.

LENGTH GROUP	MAY	JUN.	JUL.	AUG.	SEP.	2nd QUARTER	3rd QUARTER	TOTAL	LENGTH GROUP
48	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.1	48
51	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.2	51
54	0.0	1.5	1.2	0.0	0.0	1.3	0.5	1.0	54
57	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.3	57
60	0.0	0.9	0.3	0.0	0.0	0.8	0.2	0.5	60
63	0.0	4.0	2.3	0.0	1.1	3.5	1.2	2.8	63
66	0.0	6.1	3.5	0.0	0.0	5.4	1.6	3.8	66
69	1.1	10.1	11.7	0.0	0.0	9.1	5.2	7.5	69
72	2.9	23.5	7.8	2.4	2.0	21.2	4.7	14.4	72
75	15.9	54.0	15.6	3.1	2.8	49.6	8.7	32.8	75
78	38.9	91.3	14.1	4.6	10.9	85.3	10.0	54.4	78
81	94.0	114.5	26.7	13.0	13.8	112.2	19.3	74.0	81
84	142.4	139.0	29.5	18.5	32.5	139.4	25.9	92.8	84
87	125.9	112.9	27.1	39.4	41.3	114.4	34.3	81.5	87
90	114.8	98.2	59.1	62.3	65.3	100.1	61.4	84.2	90
93	97.5	71.5	77.0	86.1	97.3	74.5	84.1	78.4	93
96	68.8	68.9	86.7	115.7	117.3	68.9	103.0	82.9	96
99	58.0	52.2	111.8	111.8	125.0	52.9	114.1	78.0	99
102	45.3	36.7	135.9	128.9	105.7	37.7	127.9	74.7	102
105	45.3	28.2	117.9	119.7	105.5	30.2	118.3	65.5	105
108	32.3	18.9	85.5	92.9	87.3	20.4	88.6	48.4	108
111	33.9	24.4	57.6	61.5	68.6	25.5	61.0	40.1	111
114	29.8	12.1	41.5	53.0	43.1	14.2	48.1	27.3	114
117	9.3	11.7	34.6	27.8	23.3	11.4	30.0	19.1	117
120	16.8	8.8	26.2	24.0	18.6	10.4	24.0	16.0	120
123	13.7	4.3	15.4	17.3	17.3	5.4	16.4	9.9	123
126	9.7	2.1	5.6	11.8	18.0	3.0	10.1	5.9	126
129	2.4	1.5	3.6	3.4	1.3	1.6	3.1	2.2	129
132	0.0	0.8	1.4	2.0	0.8	0.7	1.5	1.0	132
135	0.3	0.0	0.4	0.9	1.1	0.0	0.7	0.3	135
138	1.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1	138
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	15	19	21	23	18	34	62	96	
SAMPLING WEIGHT(kg)	129667	21292	20530	20083	8141	150959	48754	199713	
No.F.MEASURED	1456	2946	1982	1266	770	4400	3998	8398	
MEAN LENGTH(cm)	94.3	89.9	101.1	102.8	101.9	90.4	101.8	95.1	
MEAN WEIGHT (g)	7990	6914	9806	10206	9963	7037	9984	8246	
DEPTH RANGE (m)	41/180	117/171	58/171	63/88	59/72	41/180	58/171	41/180	

TABLE IX-A: RED-FISH (*S. mentella*), DIVISION 3L, 1991: Length composition of the trawl catches.

	FEBRUARY		MARCH		APRIL		MAY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER	
LENGTH GROUP	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
17	0.0	0.0	0.0	0.0	1.7	1.7	6.7	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	5.2	5.2	5.8	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	8.7	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.9
20	0.0	0.0	0.0	0.0	2.6	14.4	3.7	20.7	0.0	0.0	0.0	0.0	0.0	0.6	6.1	2.6
21	0.0	0.0	3.9	35.6	5.4	49.5	6.7	61.3	0.0	10.3	0.0	3.4	1.9	19.6	2.6	14.4
22	0.3	6.9	3.7	75.2	4.2	85.8	6.2	126.5	0.0	10.3	0.0	0.0	1.9	62.3	6.7	88.1
23	0.0	0.0	4.9	126.6	7.0	178.9	7.0	178.8	0.0	0.0	0.0	35.9	2.5	106.3	9.9	131.5
24	2.6	19.0	19.2	138.7	17.6	127.3	21.0	157.1	10.3	10.3	4.8	90.8	8.3	89.5	23.2	76.2
25	5.0	30.8	27.6	169.8	13.4	82.8	11.4	70.3	10.3	15.5	12.0	80.2	12.2	85.8	17.9	81.2
26	1.0	6.2	20.8	123.9	8.9	52.8	7.0	41.8	5.2	10.3	10.6	59.0	10.9	71.4	17.0	83.7
27	10.0	62.0	10.8	68.0	8.2	38.3	7.0	43.7	15.5	15.5	34.4	57.7	16.6	116.2	21.0	123.9
28	17.8	54.4	16.1	49.7	16.1	49.7	8.8	27.2	10.3	20.6	21.6	126.5	27.2	74.7	24.4	93.2
29	14.1	38.2	7.4	18.8	10.7	27.3	7.9	20.2	15.5	10.3	11.2	46.1	17.1	40.9	9.9	32.1
30	6.2	22.6	5.6	20.7	5.9	21.7	5.8	21.4	15.5	25.8	18.6	107.1	18.2	65.3	14.5	51.2
31	12.3	38.1	0.0	0.0	5.0	15.6	4.1	12.9	25.8	10.3	35.7	49.6	7.6	29.0	9.3	27.4
32	16.5	48.3	3.4	9.8	5.3	15.4	3.0	8.7	15.5	10.3	4.0	24.9	12.8	29.7	2.4	28.7
33	19.5	38.1	0.0	0.0	8.2	18.0	4.9	9.5	20.6	10.3	12.8	65.6	8.7	11.2	1.1	2.4
34	31.7	54.7	0.0	0.0	10.1	17.5	5.4	9.3	38.1	30.9	4.7	21.2	3.9	5.5	1.1	4.7
35	29.0	78.9	0.0	0.0	4.6	12.6	3.0	8.1	30.9	10.3	0.0	23.6	5.0	12.8	0.0	2.3
36	23.4	48.6	0.0	0.0	5.6	11.7	4.1	8.8	25.8	51.5	0.0	16.5	3.6	7.4	2.3	36
37	5.5	16.1	3.3	9.8	1.8	5.2	1.0	2.9	36.1	51.5	0.0	6.8	0.8	3.9	2.4	37
38	0.8	13.8	0.7	12.5	0.4	6.8	0.1	2.3	10.3	56.7	0.0	1.7	0.0	2.0	0.0	38
39	0.0	21.6	0.0	13.2	0.0	0.0	0.0	1.1	10.0	81.9	0.0	1.7	0.0	0.5	0.0	39
40	0.0	43.2	0.0	0.0	0.0	0.0	0.0	4.2	0.0	81.9	0.0	13.5	0.0	1.0	0.0	40
41	0.0	36.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	51.5	0.0	0.0	0.0	0.5	0.0	41
42	6.4	51.2	0.0	0.0	0.8	6.2	0.1	0.6	10.3	82.5	0.0	0.0	0.0	0.0	0.0	42
43	10.3	25.7	0.0	0.0	1.0	2.4	0.3	0.8	10.3	25.8	0.0	0.0	0.0	0.0	0.0	43
44	0.0	21.6	0.0	0.0	0.0	0.0	0.0	2.4	0.0	10.3	0.0	0.0	0.0	0.0	0.0	44
45	0.0	14.4	0.0	0.0	0.0	0.0	0.0	0.5	0.0	30.9	0.0	0.0	0.0	0.0	0.0	45
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0	0.0	46
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50
51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51
TOTAL	212.0	708.0	127.6	872.4	147.6	852.4	131.9	868.1	304.1	695.9	188.3	831.7	157.7	842.3	168.3	831.7
NO. SAMPLES	1	1	2	10	2	3	11	4								
SAMPLING WEIGHT(Kg)(M+F)	102	22	50	488	151	218	925	335								
NO.F.MEASURED(M+F)	139	76	184	1375	194	455	2230	890								
MEAN LENGTH(cm)	33.5	34.5	26.8	25.9	28.2	26.0	26.6	25.2	33.6	37.3	29.4	29.1	29.2	27.0	27.3	28.5
MEAN WEIGHT(g)	559	661	286	270	351	281	297	258	566	826	389	384	366	304	303	288
MEAN WEIGHT(M+F)	640	272			292		263	747	747	382		314				289
DEPTH RANGE (m)	350/728	277/1140		220/663	250/1128		348/473	331/574		350/576						362/610

TABLE IX-A: RED-FISH (*S. mentella*), DIVISION 3L, 1991: (cont.)

LENGTH GROUP	1st QUARTER		2nd QUARTER		3rd QUARTER		4th QUARTER		TOTAL 1991		LENGTH GROUP
	M	F	M	F	M	F	M	F	M	F	
17	0.0	0.0	6.3	8.3	0.0	0.0	0.0	0.0	2.5	2.5	17
18	0.0	0.0	5.7	5.7	0.0	0.0	0.0	0.0	2.3	2.3	18
19	0.0	0.0	0.0	10.8	0.0	0.0	0.0	0.9	0.0	4.8	19
20	0.0	0.0	3.6	20.2	0.0	0.0	1.1	6.1	2.0	11.2	20
21	2.8	25.8	6.6	80.3	0.0	4.9	2.0	18.3	3.9	35.2	21
22	2.8	56.4	6.0	122.9	0.0	2.3	3.1	63.3	4.2	84.9	22
23	3.6	91.7	7.0	178.9	0.0	27.9	4.5	112.8	5.3	135.5	23
24	14.6	105.7	21.4	154.5	6.0	72.9	12.1	86.0	15.0	114.3	24
25	21.3	131.5	11.6	71.4	11.6	85.7	13.7	84.6	13.3	81.7	25
26	15.4	91.4	7.2	42.8	8.4	48.1	12.5	74.6	10.5	62.2	26
27	10.7	66.4	6.9	43.2	30.1	48.3	17.7	118.2	13.3	82.9	27
28	18.5	51.0	9.4	29.2	19.1	102.8	28.5	79.5	18.8	58.3	28
29	9.3	23.7	8.1	20.9	12.2	38.1	15.2	38.6	11.9	30.6	29
30	5.8	21.2	5.8	21.4	16.4	88.9	17.3	81.7	11.9	43.8	30
31	3.4	10.5	4.2	13.1	33.4	40.8	8.1	28.6	7.0	21.6	31
32	7.0	20.4	3.2	9.3	6.6	21.7	10.1	28.4	7.0	20.6	32
33	5.4	10.5	5.2	10.1	14.6	53.2	5.3	9.0	5.5	10.8	33
34	9.7	15.1	5.8	10.0	11.7	23.3	3.2	5.3	4.8	8.3	34
35	8.0	21.8	3.1	8.5	6.9	20.6	3.7	10.0	3.8	10.5	35
36	6.4	13.4	4.3	8.9	5.8	24.4	3.3	6.1	3.9	8.2	36
37	3.9	11.6	1.0	3.1	8.1	18.8	1.1	3.5	1.4	4.2	37
38	0.7	12.8	0.2	2.7	2.3	14.0	0.0	1.5	0.2	3.0	38
39	0.0	15.5	0.0	1.0	0.0	15.1	0.0	0.4	0.0	2.0	39
40	0.0	11.9	0.0	3.8	0.0	24.3	0.0	0.8	0.0	3.4	40
41	0.0	9.9	0.0	1.0	0.0	11.5	0.0	0.4	0.0	1.6	41
42	1.8	14.1	0.1	1.1	2.3	18.4	0.0	0.0	0.2	1.9	42
43	2.8	7.1	0.4	0.9	2.3	5.8	0.0	0.0	0.4	1.0	43
44	0.0	6.0	0.0	2.2	0.0	2.3	0.0	0.0	0.0	1.3	44
45	0.0	4.0	0.0	0.5	0.0	8.9	0.0	0.0	0.0	0.6	45
46	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.1	46
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48
49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50
51	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	51
TOTAL	150.9	849.1	133.3	866.7	188.7	801.3	160.4	839.6	150.1	849.9	
NO. SAMPLES		2		12		5		15		34	
SAMPLING WEIGHT(Kg)(M+F)		124		538		367		1280		2289	
NO. F. MEASURED(M+F)		215		1559		649		3120		5543	
MEAN LENGTH(cm)	29.4	28.1	26.7	25.3	30.8	30.7	28.7	26.9	28.1	26.4	
MEAN WEIGHT (g)	391	370	303	260	436	470	349	300	338	293	
MEAN WEIGHT(M+F)		374		266		463		308		299	
DEPTH RANGE (m)		277/1140		220/1128		331/574		350/610		220/1140	

TABLE IX-B: RED-FISH (*S. mentella*), DIVISION 3W, 1991: length composition of the trawl catches.

LENGTH GROUP	APRIL		MAY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		LENGTH GROUP
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
18	1.2	8.9	0.1	0.5	0.0	0.0	0.0	0.2	0.0	0.3	0.3	1.9	0.0	0.0	18
19	2.1	23.9	0.8	8.7	0.0	0.5	1.6	1.3	0.1	2.0	0.7	9.0	1.2	20.5	19
20	5.4	46.4	3.4	29.1	0.5	9.8	1.3	4.7	0.6	3.7	1.8	14.9	3.8	39.2	20
21	4.2	24.2	6.1	35.2	0.7	12.9	1.1	6.2	0.4	8.4	2.9	14.7	7.1	36.7	21
22	0.7	3.2	5.5	24.4	1.3	14.2	4.1	11.3	2.8	8.4	3.4	19.2	11.8	31.1	22
23	0.9	3.5	4.7	17.7	1.2	11.6	4.4	14.4	3.5	14.4	3.0	12.4	8.0	16.7	23
24	4.5	6.1	16.1	21.9	4.8	12.3	5.7	12.4	10.9	10.1	9.6	14.1	23.0	24.2	24
25	12.5	10.5	35.1	29.3	8.4	16.1	14.5	25.5	40.8	35.8	35.4	27.0	69.3	51.5	25
26	48.4	30.8	66.2	41.8	27.7	22.9	20.9	15.4	73.8	45.4	81.6	39.0	127.7	78.6	26
27	48.5	49.3	74.8	76.0	84.1	73.5	63.8	24.3	86.1	96.5	73.4	76.9	97.1	112.1	27
28	44.9	49.3	41.2	45.2	63.5	82.6	92.6	83.3	78.6	86.0	84.7	67.6	32.5	63.8	28
29	37.8	25.1	31.9	21.2	48.1	105.1	74.1	41.8	49.9	43.1	83.3	30.5	17.5	17.8	29
30	29.1	29.4	25.9	26.1	16.7	127.1	74.4	84.8	53.9	52.1	57.1	44.5	26.9	23.8	30
31	21.6	25.4	17.5	20.6	5.2	68.9	30.1	55.2	30.9	30.5	33.4	33.7	19.5	4.2	31
32	31.9	32.6	24.2	24.6	13.8	34.1	26.9	33.7	22.3	15.8	29.7	28.8	7.1	8.4	32
33	26.8	19.3	19.4	16.0	7.1	30.0	26.4	11.8	12.4	12.4	21.0	12.4	2.3	0.2	33
34	33.2	33.7	19.5	19.8	12.9	17.1	18.6	8.8	9.5	4.1	10.2	13.1	2.7	0.8	34
35	25.2	33.0	16.5	21.7	3.9	17.2	24.3	17.9	10.3	6.4	8.9	14.2	2.6	3.9	35
36	21.4	33.8	12.8	19.9	0.7	10.1	12.1	12.4	4.4	4.5	5.3	9.0	0.2	0.1	36
37	14.6	27.4	10.3	19.2	0.7	8.2	15.5	9.5	2.1	3.8	3.9	9.4	0.1	0.2	37
38	7.4	17.7	5.1	12.1	4.2	5.4	2.7	7.9	1.7	2.9	1.8	4.5	0.1	3.8	38
39	3.6	20.5	1.8	10.0	0.0	5.0	0.9	4.1	1.2	1.4	0.6	5.0	0.8	0.1	39
40	2.0	8.2	2.3	8.5	0.0	2.7	3.4	3.9	0.7	1.7	0.5	3.2	0.0	1.9	40
41	0.6	4.3	0.4	3.1	0.0	2.9	1.2	3.5	0.5	0.5	0.0	1.1	0.0	0.7	41
42	0.9	2.5	0.8	2.3	0.0	0.0	1.2	1.0	0.0	0.4	0.2	0.5	0.0	1.2	42
43	0.0	1.9	0.0	1.4	0.0	2.7	0.0	0.9	0.0	0.6	0.0	0.2	0.0	0.1	43
44	0.0	0.0	0.2	1.7	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	44
45	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	45
46	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	46
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	48
TOTAL	429.5	570.5	442.3	557.7	303.5	696.5	521.5	478.5	498.0	502.0	492.8	507.2	461.2	538.8	
NO. SAMPLES		8		11		5		11		19		32		7	
SAMPLING WEIGHT(Kg)(M+F)		410		564		375		1018		1537		2985		582	
NO.F.MEASURED(M+F)		1033		1527		1033		2403		3936		7477		1440	
MEAN LENGTH(cm)	30.7	30.1	29.3	28.9	29.0	29.9	30.3	30.2	28.9	28.5	29.1	28.7	27.1	26.1	
MEAN WEIGHT(g)	433	453	379	400	355	414	410	432	354	357	364	375	292.	276	
MEAN WEIGHT(M+F)		444		390		396		420		355		369		284	
DEPTH RANGE (m)		241/710		210/900		258/635		170/537		248/512		68/467		220/440	

TABLE IX-B: RED-FISH (*S.mentella*), DIVISION 3W, 1991: (cont.)

LENGTH GROUP	2nd QUARTER		3rd QUARTER		4th QUARTER		TOTAL 1991		LENGTH GROUP
	M	F	M	F	M	F	M	F	
18	0.8	5.6	0.0	0.1	0.2	1.4	0.3	2.4	18
19	1.8	18.0	0.8	0.9	0.7	8.9	0.9	10.5	19
20	4.6	39.7	0.9	7.1	1.8	15.3	2.4	21.1	20
21	5.0	28.5	0.9	9.3	2.9	15.0	3.2	18.6	21
22	2.6	11.5	2.8	12.6	4.2	18.3	3.6	15.8	22
23	2.4	9.0	2.9	13.1	3.6	13.3	3.2	12.1	23
24	9.0	12.2	5.3	12.3	11.3	16.5	10.0	13.7	24
25	21.3	17.8	10.7	21.1	40.2	31.4	31.8	28.6	25
26	55.3	35.0	24.1	18.9	71.2	44.3	61.7	39.0	26
27	58.7	59.7	73.2	47.2	78.5	84.6	72.5	73.7	27
28	43.5	47.7	79.1	72.3	64.0	72.8	60.0	65.8	28
29	35.5	23.6	62.0	11.3	55.6	31.6	50.8	33.7	29
30	27.9	28.1	47.8	104.5	53.2	43.7	45.7	46.1	30
31	20.0	23.5	18.5	61.6	31.4	29.8	26.9	31.6	31
32	28.9	29.5	20.8	33.9	25.8	24.1	26.1	26.6	32
33	23.9	17.2	17.4	20.3	17.3	11.1	19.1	13.8	33
34	27.9	28.3	15.9	12.6	9.2	10.0	15.1	15.3	34
35	21.8	28.6	14.8	17.6	8.5	11.5	12.8	18.8	35
36	18.0	28.4	6.8	11.3	4.8	7.1	8.5	13.4	36
37	12.9	24.2	8.6	8.9	3.2	7.3	6.5	12.1	37
38	6.5	15.5	3.4	8.7	1.6	4.1	3.2	7.5	38
39	2.9	16.4	0.5	4.5	0.7	3.7	1.3	7.3	39
40	2.1	8.7	1.0	3.4	0.5	2.7	1.1	4.4	40
41	0.8	3.8	0.6	3.2	0.1	0.9	0.3	2.0	41
42	0.9	2.4	0.6	0.5	0.1	0.6	0.4	1.1	42
43	0.0	1.7	0.0	1.7	0.0	0.2	0.0	0.8	43
44	0.1	0.7	0.0	0.0	0.0	0.2	0.0	0.3	44
45	0.0	0.0	0.0	1.8	0.0	0.1	0.0	0.2	45
46	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.1	46
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47
48	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.1	48
TOTAL	436.5	565.5	420.0	580.0	490.4	509.6	467.4	532.6	
NO. SAMPLES		19		16		58		93	
SAMPLING WEIGHT(Kg)(M+F)		974		1393		5104		7471	
NO.F.MEASURED(M+F)		2560		3438		12853		18849	
MEAN LENGTH(cm)	30.2	29.7	29.8	30.0	28.9	28.6	29.3	28.9	
MEAN WEIGHT (g)	412	432	391	422	354	360	373	388	
MEAN WEIGHT(M+F)		423		409		357		381	
DEPTH RANGE (m)		210/900		170/537		68/512		68/900	

TABLE IX-C: RED-FISH (*S. mentella*), DIVISION 3NO, 1991: length composition of the trawl catches.

TABLE IX-C: RED-FISH (*S. mentella*), DIVISION 3NO, 1991: (cont.)

LENGTH GROUP	1st QUARTER		2nd QUARTER		3rd QUARTER		4th QUARTER		TOTAL 1991		
	M	F	M	F	M	F	M	F	M	F	LENGTH GROUP
15	0.8	0.8	1.3	1.3	0.0	0.0	0.0	0.0	0.3	0.3	15
16	4.2	1.4	6.1	2.0	0.0	0.0	0.6	0.2	1.8	0.6	16
17	1.6	4.0	2.7	6.8	0.0	1.7	2.1	4.0	1.6	3.9	17
18	6.4	5.1	17.4	19.8	0.0	5.0	12.6	10.7	9.6	10.9	18
19	4.7	6.5	29.0	40.5	0.7	8.4	28.4	34.1	19.2	26.8	19
20	23.7	46.3	20.0	39.1	1.4	9.4	39.3	72.1	22.5	44.0	20
21	30.2	41.9	20.0	27.7	3.0	9.9	43.0	55.4	24.8	34.3	21
22	31.1	42.4	24.9	34.0	6.2	13.4	28.4	36.6	21.1	28.8	22
23	47.2	84.0	30.6	41.4	27.0	49.5	29.1	30.0	29.3	39.7	23
24	50.3	63.5	36.9	46.6	24.5	52.4	43.5	39.1	36.2	45.7	24
25	74.3	73.1	36.7	36.2	37.9	45.2	58.2	49.5	48.4	45.7	25
26	37.7	49.2	36.2	47.3	33.3	53.7	40.8	45.5	37.2	48.6	26
27	26.2	46.6	21.1	31.6	33.8	58.0	24.5	45.1	26.7	47.5	27
28	15.9	38.9	16.7	40.9	26.5	74.4	16.4	33.0	19.6	48.0	28
29	9.5	41.9	7.4	32.8	11.4	57.1	7.2	27.1	8.6	38.2	29
30	2.1	10.3	5.9	28.7	11.6	71.7	9.5	34.6	9.1	44.2	30
31	2.7	15.0	6.6	36.3	7.3	49.5	5.9	25.4	6.4	35.2	31
32	2.3	16.8	4.5	32.8	6.9	46.3	2.8	23.9	4.5	32.8	32
33	4.0	18.4	6.5	29.7	6.0	26.4	2.2	10.8	4.4	20.3	33
34	1.6	7.9	4.4	22.0	4.6	19.3	1.1	7.9	3.0	14.8	34
35	0.9	3.1	1.4	4.8	5.1	17.5	1.2	4.7	2.4	8.7	35
36	0.4	1.2	2.6	7.7	5.0	13.5	1.0	4.3	2.6	7.9	36
37	1.8	2.9	4.0	6.3	5.5	9.9	2.1	2.3	3.6	5.7	37
38	3.0	3.9	4.9	6.4	7.5	8.9	0.5	1.4	3.8	5.0	38
39	0.8	0.8	4.6	4.8	7.0	7.1	0.2	0.4	3.4	3.5	39
40	0.8	1.4	1.6	2.9	2.9	5.8	0.6	0.8	1.5	2.8	40
41	1.0	3.5	1.2	4.0	1.3	3.8	0.1	0.6	0.7	2.5	41
42	0.8	1.7	0.2	0.5	0.5	2.1	0.2	0.2	0.3	0.9	42
43	0.8	0.9	0.2	0.2	0.5	0.8	0.1	0.0	0.3	0.3	43
44	0.0	0.0	0.3	2.2	0.1	1.1	0.0	0.0	0.1	0.8	44
45	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.1	0.0	0.3	45
46	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	46
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47
48	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48
TOTAL	384.7	615.3	355.7	644.3	277.8	722.2	400.3	599.7	351.1	648.9	
NO. SAMPLES			3		14		21		24		62
SAMPLING WEIGHT(Kg)(M+F)		165		555		1805		1814		3939	
NO.F.MEASURED(M+F)		580		1754		4022		5337		11693	
MEAN LENGTH(cm)	25.0	26.1	25.2	27.0	28.4	28.9	24.3	25.6	25.6	27.1	
MEAN WEIGHT (g)	240	288	258	328	353	385	221	271	263	324	
MEAN WEIGHT(M+F)		268		302		376		251		303	
DEPTH RANGE (m)		240/766		133/770		58/1087		38/1000		38/1000	

TABLE IX-D: RED-FISH (*S.mentella*), DIVISION 3W, 1991: length composition of the gillnet catches.

	MAY		JUNE		JULY		OCTOBER		NOVEMBER		DECEMBER		
LENGTH GROUP	M	F	M	F	M	F	M	F	M	F	M	F	LENGTH GROUP
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	21
22	0.0	0.1	0.0	0.0	5.4	0.0	0.0	0.0	2.2	0.4	0.0	0.0	22
23	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.5	0.0	2.3	23
24	2.2	1.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	24
25	6.9	3.7	4.1	0.0	16.1	0.0	2.5	2.5	5.0	3.4	0.0	2.3	25
26	13.2	9.6	4.1	0.0	21.5	0.0	5.0	17.6	15.1	10.8	0.0	0.0	26
27	3.3	6.8	4.1	20.6	10.8	5.4	12.2	15.1	22.3	19.1	0.0	7.8	27
28	2.3	5.9	0.0	4.1	10.8	16.1	8.4	15.2	15.7	17.9	0.0	0.0	28
29	2.8	0.6	0.0	0.0	16.1	48.4	8.4	26.4	10.4	24.3	0.0	0.0	29
30	7.7	6.4	4.1	8.2	10.8	75.3	13.9	29.9	11.1	21.2	13.9	0.0	30
31	6.6	8.6	24.7	4.1	10.8	59.1	10.6	16.5	8.6	27.7	5.6	0.0	31
32	4.0	10.9	24.7	8.2	16.1	86.0	17.3	9.8	15.6	34.4	0.0	0.0	32
33	1.8	13.1	20.6	45.3	0.0	43.0	20.4	23.2	9.7	25.7	0.0	2.3	33
34	10.9	34.3	24.7	39.4	16.1	145.2	25.2	27.5	8.7	25.5	0.0	10.5	34
35	12.6	39.2	18.5	69.9	5.4	112.9	17.0	77.7	7.3	33.0	0.0	27.4	35
36	14.1	59.8	16.5	86.4	10.8	89.9	17.1	79.4	13.6	48.5	2.3	43.5	36
37	10.9	85.6	8.4	113.5	0.0	102.2	27.7	53.0	15.2	63.0	8.2	61.1	37
38	10.9	83.4	13.5	72.3	5.4	37.6	11.1	69.4	10.3	65.4	8.2	75.6	38
39	6.5	128.5	4.1	90.0	0.0	28.9	20.5	87.0	7.8	55.9	5.8	75.8	39
40	2.4	122.8	0.0	77.7	5.4	10.8	8.8	70.4	8.5	62.9	13.8	76.3	40
41	0.3	101.2	0.0	21.8	0.0	0.0	16.1	24.8	7.7	60.3	16.4	60.8	41
42	0.3	80.8	1.2	21.3	0.0	0.0	12.8	26.7	4.9	36.8	30.8	80.5	42
43	1.1	23.9	1.2	29.7	0.0	0.0	4.3	17.7	5.8	31.3	0.0	46.1	43
44	0.1	31.8	1.2	8.4	0.0	0.0	4.6	16.5	2.2	24.0	5.6	80.0	44
45	0.0	11.9	2.4	13.2	0.0	0.0	5.0	7.2	4.9	10.3	5.8	80.3	45
46	0.0	4.3	2.4	8.4	0.0	0.0	2.1	6.8	1.7	19.0	0.0	42.1	46
47	0.0	2.8	2.4	13.7	0.0	0.0	2.5	9.7	0.3	10.6	0.0	25.2	47
48	0.0	1.6	0.0	12.0	0.0	0.0	0.0	2.1	0.3	11.6	0.0	43.8	48
49	0.0	0.9	0.0	12.0	0.0	0.0	2.5	2.5	0.2	7.9	0.0	19.5	49
50	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	7.4	0.0	19.5	50
51	0.0	0.0	0.0	7.2	0.0	0.0	0.0	2.5	0.0	9.0	0.0	25.2	51
52	0.0	0.0	0.0	10.8	0.0	0.0	0.0	1.3	0.0	6.9	0.0	8.2	52
53	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	53
54	0.0	0.0	0.0	2.4	0.0	0.0	2.1	2.5	0.0	1.1	0.0	0.0	54
55	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	55
56	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.1	0.0	0.0	8.2	56
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63
64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	64
TOTAL	122.4	877.6	181.9	818.1	161.3	838.7	279.3	720.7	217.7	782.3	115.9	884.1	
NO. SAMPLES		8		2		1		3		16		3	
SAMPLING WEIGHT(Kg)	143.5	1288.5	34.5	370	13.5	94.5	112	307	310.0	1583	18	178	
NO.F.MEASURED	259	1600	52	276	30	156	146	374	413	1537	19	155	
MEAN LENGTH(cm)	33.4	39.0	34.6	38.8	30.6	34.3	36.1	37.1	33.9	38.3	39.5	42.3	
MEAN WEIGHT (g)	557	904	608	913	431	610	707	800	601	897	896	1172	
MEAN WEIGHT(W+F)		862		858		581		774		833		1140	
DEPTH RANGE (m)	130/596		128/360		133/365		133/362		191/355		235/269		

TABLE IX-D; RED-FISH (*S.mentella*), DIVISION 3M, 1991: (cont.)

LENGTH GROUP	2nd QUARTER		3rd QUARTER		4th QUARTER		TOTAL 1991		LENGTH GROUP
	M	F	M	F	M	F	M	F	
21	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	21
22	0.0	0.1	5.4	0.0	1.6	0.3	1.1	0.1	22
23	1.1	0.0	0.0	0.0	0.9	1.3	0.8	0.2	23
24	1.6	2.0	0.0	0.0	0.0	1.2	1.1	1.5	24
25	6.0	2.6	16.1	0.0	4.1	3.1	7.3	2.3	25
26	10.4	6.7	21.5	0.0	12.1	11.0	12.4	6.3	26
27	3.6	11.0	10.8	5.4	18.7	17.4	7.0	11.1	27
28	1.6	5.3	10.0	16.1	13.2	15.9	4.7	8.6	28
29	1.9	0.4	16.1	48.4	9.2	22.5	5.2	11.0	29
30	6.8	8.9	10.8	75.3	11.8	20.8	8.1	19.3	30
31	12.1	7.2	10.8	59.1	8.7	23.5	11.4	17.5	31
32	10.3	10.1	16.1	86.0	14.5	27.4	11.8	24.2	32
33	7.5	22.9	0.0	43.0	10.6	23.3	6.9	26.0	33
34	15.1	35.9	16.1	145.2	10.6	24.5	14.5	50.6	34
35	13.8	48.5	5.4	112.9	8.2	39.8	11.7	56.9	35
36	14.8	67.9	10.8	69.9	13.1	51.8	13.9	65.7	36
37	10.4	94.0	0.0	102.2	16.6	61.2	9.8	90.2	37
38	11.7	80.1	5.4	37.6	10.2	66.9	10.5	71.7	38
39	5.8	115.4	0.0	26.9	9.7	59.4	5.5	83.5	39
40	1.7	109.1	5.4	10.8	9.2	65.3	3.4	87.5	40
41	0.2	77.1	0.0	0.0	9.9	54.5	1.6	62.0	41
42	0.6	62.7	0.0	0.0	8.5	37.2	1.7	49.3	42
43	1.1	25.7	0.0	0.0	4.9	30.4	1.5	22.5	43
44	0.4	24.8	0.0	0.0	2.8	27.7	0.7	21.5	44
45	0.7	12.3	0.0	0.0	5.0	14.1	1.3	10.7	45
46	0.7	5.6	0.0	0.0	1.6	19.0	0.8	8.8	46
47	0.7	6.1	0.0	0.0	0.7	11.7	0.8	6.1	47
48	0.0	4.8	0.0	0.0	0.3	12.9	0.0	5.3	48
49	0.0	4.3	0.0	0.0	0.6	8.0	0.1	4.2	49
50	0.0	1.5	0.0	0.0	0.0	7.3	0.0	2.1	50
51	0.0	2.2	0.0	0.0	0.0	9.4	0.0	3.0	51
52	0.0	3.3	0.0	0.0	0.0	6.1	0.0	3.2	52
53	0.0	1.5	0.0	0.0	0.0	2.3	0.0	1.4	53
54	0.0	0.7	0.0	0.0	0.4	1.2	0.1	0.7	54
55	0.0	0.7	0.0	0.0	0.0	1.1	0.0	0.7	55
56	0.0	0.4	0.0	0.0	0.8	0.7	0.1	0.4	56
57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57
58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58
59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60
61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61
62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62
63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63
64	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.1	64

TOTAL	140.5	859.5	181.3	838.7	218.9	781.1	155.6	844.4
NO. SAMPLES		10		1		22		33
SAMPLING WEIGHT(kg)	178	1658.5	13.5	94.5	440.8	204.9	632.3	3802
NO.F.MEASURED	311	1878	30	156	578	2066	919	4098
MEAN LENGTH(cm)	33.8	39.0	30.6	34.3	36.6	38.5	33.5	38.2
MEAN WEIGHT (g)	577	907	431	610	637	910	567	863
MEAN WEIGHT(M+F)		861		581		850		817
DEPTH RANGE (m)		130/596		133/365		133/362		130/596

TABLE X-A: GREENLAND HALIBUT (TURBOT), DIVISION 3L, 1991: length composition of the trawl catches.

LENGTH GROUP	MAY		JUNE		2nd QUARTER = TOTAL		LENGTH GROUP
	N	F	N	F	N	F	
30	0.0	0.0	2.3	2.3	0.4	0.4	30
32	3.8	0.0	4.7	0.0	3.8	0.0	32
34	42.8	1.5	27.0	10.7	39.8	3.2	34
36	39.5	11.3	40.5	8.1	39.7	10.4	36
38	35.1	29.7	30.3	20.0	34.2	20.0	38
40	53.2	50.0	45.6	37.2	51.8	47.8	40
42	42.7	35.0	37.0	57.7	50.9	39.2	42
44	77.5	68.8	58.6	57.8	74.0	65.0	44
46	50.9	82.4	45.6	56.0	49.9	77.2	46
48	59.3	85.2	43.8	48.1	58.4	81.8	48
50	32.3	38.8	32.1	30.7	32.2	35.5	50
52	7.5	30.7	18.1	34.9	9.5	31.5	52
54	11.9	40.8	17.7	39.1	13.0	40.5	54
56	1.4	22.4	14.4	29.8	3.8	23.8	56
58	4.4	14.7	5.8	11.7	4.6	14.2	58
60	0.0	13.3	9.3	38.8	1.7	17.7	60
62	2.9	14.3	0.0	27.5	2.4	16.7	62
64	2.8	6.1	0.0	8.8	2.3	6.8	64
66	0.0	2.9	0.0	3.7	0.0	3.1	66
68	0.0	0.0	0.0	2.3	0.0	0.4	68
70	0.0	4.4	0.0	0.0	0.0	3.6	70
72	0.0	1.4	0.0	0.0	0.0	1.1	72
74	0.0	1.4	0.0	0.0	0.0	1.1	74
76	0.0	0.0	0.0	0.0	0.0	0.0	76
78	0.0	0.0	0.0	0.0	0.0	0.0	78
80	0.0	0.0	0.0	0.0	0.0	0.0	80
82	0.0	1.4	0.0	0.0	0.0	1.1	82
TOTAL	487.7	532.3	482.8	517.2	470.5	529.5	
No. SAMPLES	5		4		9		
SAMPLING WEIGHT(kg)	170	287	134	219	304	486	
No.F.MEASURED	210	244	171	183	381	427	
MEAN LENGTH(cm)	44.2	49.0	44.8	49.8	44.3	49.1	
MEAN WEIGHT (g)	746	1077	795	1143	755	1089	
MEAN WEIGHT(N+F)		922		975		932	
DEPTH RANGE (m)	A10/1163		228/1000		229/1163		

TABLE X-B:GREENLAND HALIBUT (TURBOT) 3M, 1991:
length composition of the trawl catches.

LENGTH GROUP	OCTOBER = TOTAL	
	N	F
40	13.8	0.0
42	0.0	50.0
44	0.0	27.7
46	78.3	117.5
48	39.2	209.6
50	39.2	103.6
52	27.7	133.7
54	13.8	39.2
56	0.0	78.3
58	0.0	27.7

TOTAL 212.0 188.0

No. SAMPLES	2
SAMPLING WEIGHT(kg)	11.3
No.F.MEASURED	12
MEAN LENGTH(cm)	48.0
MEAN WEIGHT (g)	1122
MEAN WEIGHT(N+F)	1097
DEPTH RANGE (m)	287/512

TABLE I-C: GREEN AND HALIBUT (TURBOT), DIVISION 3N, 1991: LENGTH COMPOSITION OF THE TRAWL CATCHES.

TABLE XI-A: AMERICAN PLAICE, DIVISION 3L, 1981:
length composition of the trawl catches.

MARCH = TOTAL			
LENGTH GROUP	M	F	LENGTH GROUP
26	20.8	0.0	26
28	16.0	22.3	28
30	43.2	29.2	30
32	76.7	24.9	32
34	25.7	61.2	34
36	92.2	47.7	36
38	84.0	95.2	38
40	11.2	77.7	40
42	4.8	68.8	42
44	4.8	75.7	44
46	0.0	52.3	46
48	0.0	59.0	48
50	0.0	16.0	50
52	0.0	0.0	52
54	0.0	20.8	54
TOTAL	340.4	850.6	
No. SAMPLES		3	
SAMPLING WEIGHT(kg)	17.5	74	
No.F.MEASURED	43	112	
MEAN LENGTH(cm)	35.0	41.3	
MEAN WEIGHT (g)	427	726	
MEAN WEIGHT(M+F)		622	
DEPTH RANGE (m)	275/1034		

TABLE XI-B : AMERICAN PLAICE , DIVISION 3W , 1981 :
length composition of the trawl catches.

4th QUARTER				TOTAL 1981	
LENGTH GROUP	M	F	M	F	LENGTH GROUP
24	0.0	0.1	0.0	5.8	24
26	0.0	0.0	0.0	0.0	26
28	0.0	0.0	0.0	0.0	28
30	0.1	19.8	5.0	13.5	30
32	0.0	31.1	21.9	22.3	32
34	26.3	78.8	18.9	56.5	34
36	65.0	95.1	54.6	80.2	36
38	27.0	29.8	19.4	21.2	38
40	29.5	43.3	42.9	31.0	40
42	30.3	77.7	21.8	77.5	42
44	22.9	155.2	16.4	190.3	44
46	0.0	172.2	0.0	188.8	46
48	0.0	38.9	0.0	50.4	48
50	0.0	53.8	0.0	60.3	50
52	0.0	3.2	0.0	2.3	52
54	0.0	3.2	0.0	2.3	54
TOTAL	109.9	810.1	201.5	798.6	
No. SAMPLES		4		5	
SAMPLING WEIGHT(kg)	31.2	174.1	32.8	185.1	
No.F.MEASURED	34	148	37	158	
MEAN LENGTH(cm)	38.3	42.8	38.6	43.6	
MEAN WEIGHT (g)	655	875	616	935	
MEAN WEIGHT(M+F)		833		871	
DEPTH RANGE (m)	80/490			80/190	

TABLE XI-C: AMERICAN PLAICE, DIVISION 3N, 1991: Length composition of the trawl catches.

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TABLE II-D: AMERICAN PLATICE, DIVISION 3N, 1991: Length composition of the gillnet catches.

LENGTH GROUP	MAY			JUNE			OCTOBER			NOVEMBER			DECEMBER			2nd QUARTER			4th QUARTER			TOTAL 1991		
	M	F	N	M	F	N	M	F	N	M	F	N	M	F	N	M	F	N	F	LENGTH GROUP				
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24				
26	12.7	0.0	0.0	0.0	0.0	0.0	35.0	0.0	16.2	0.0	12.9	0.0	1.0	0.0	17.3	0.0	1.7	0.0	26					
28	0.0	0.0	0.0	0.0	0.0	0.0	11.5	0.0	11.7	0.0	69.0	0.0	0.0	0.0	22.1	0.0	0.9	0.0	28					
30	50.6	12.7	22.9	0.0	0.0	17.5	0.0	0.0	0.0	55.1	0.0	25.1	1.0	18.4	0.0	24.0	0.9	30						
32	101.3	0.0	53.4	30.2	51.3	0.0	61.7	0.9	85.4	0.0	57.2	35.2	64.9	0.7	57.5	33.7	32							
34	139.2	12.7	60.7	30.5	77.6	0.0	125.0	11.7	102.8	30.3	76.2	28.1	116.8	13.9	78.0	26.5	34							
36	101.3	12.7	122.1	7.6	85.1	42.6	103.5	23.0	81.7	12.9	120.5	8.0	96.5	23.0	119.4	8.7	36							
38	83.3	12.7	76.3	45.6	25.0	42.6	47.6	56.4	0.0	98.5	75.3	43.2	37.2	82.5	46.0	38								
40	38.0	12.7	84.0	15.3	8.0	41.3	21.4	60.5	0.0	129.7	88.4	15.1	15.1	70.0	77.5	11.5	40							
42	12.7	0.0	30.5	38.2	0.0	88.0	6.2	69.2	0.0	26.0	29.1	35.2	4.5	60.5	28.1	36.3	42							
44	0.0	25.3	22.9	38.2	8.0	43.8	3.4	98.4	0.0	139.6	21.1	37.2	3.3	106.5	20.4	39.9	44							
46	25.3	88.5	15.3	91.6	0.0	110.2	0.0	96.4	0.0	91.9	16.0	91.4	0.0	96.9	15.4	91.6	46							
48	12.7	126.8	0.0	108.9	18.3	158.2	0.0	94.3	0.0	37.7	1.0	108.4	1.5	90.3	1.0	107.6	48							
50	0.0	101.3	0.0	45.8	16.3	26.3	0.0	48.6	0.0	49.7	0.0	50.1	1.5	46.8	0.1	59.0	50							
52	0.0	25.3	0.0	30.5	0.0	60.1	0.3	19.3	0.0	0.0	0.0	30.1	0.0	18.8	0.0	29.7	52							
54	0.0	12.7	0.0	15.3	0.0	25.0	0.0	9.1	0.0	0.0	0.0	15.1	0.0	9.9	0.0	14.6	54							
56	0.0	0.0	0.0	0.0	0.0	8.9	0.0	3.6	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.1	56							
58	0.0	0.0	0.0	0.0	0.0	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.1	58							
TOTAL	557.0	443.0	496.2	503.8	359.2	610.8	409.1	590.9	385.8	616.2	500.9	489.1	488.5	599.5	496.6	593.4								
NO. SAMPLES		1	1	1	1	5	20	20	3	3	44.3	52.5	2	28			30							
SAMPLING WEIGHT(kg)	20.5	43	32	66	16	80.6	112.7	427.7	6.4	44.3	109	133.1						105.6	601.6					
NO. F. MEASURED	44	35	65	86	35	62	251	380	21	41	109	101	307	403			416	584						
MEAN LENGTH(cm)	36.4	47.5	38.0	45.1	38.0	46.0	35.5	45.2	31.0	43.5	37.9	45.3	35.1	45.1			37.0	45.2						
MEAN WEIGHT(g)	521	1215	1053	925	1171	473	1037	370	911	586	1085	460	1027	582	1063									
MEAN WEIGHT(MNF)	829		825		939		806		792		825		800		824									
DEPTH RANGE (m)	136/556		128/300		127/362		164/355		235/269		126/596		127/362		126/596									

TABLE XIII-A: YELLOWTAIL FLOUNDER, DIVISION 3N, 1991: length composition of the trawl catches.

LENGTH GROUP	SEP.= 3rd Q.		OCT.= 4th Q.		TOTAL		LENGTH GROUP
	M	F	M	F	M	F	
16	0.4	1.8	6.4	6.4	0.7	2.0	16
18	2.9	5.0	12.9	25.8	3.3	5.8	18
20	4.2	15.0	0.0	18.5	4.0	15.1	20
22	23.6	39.4	12.9	12.9	23.2	38.3	22
24	65.4	90.8	84.0	113.4	65.4	91.8	24
26	112.5	176.8	109.2	151.7	112.4	175.8	26
28	63.5	122.2	75.2	93.0	64.0	120.9	28
30	34.9	110.8	36.7	97.6	35.0	110.3	30
32	8.7	39.0	12.9	97.4	8.9	41.5	32
34	8.4	20.3	0.0	45.1	8.1	21.4	34
36	4.8	18.0	0.0	0.0	4.6	17.3	36
38	3.4	10.6	0.0	3.6	3.3	10.3	38
40	2.4	6.0	0.0	0.0	2.3	5.8	40
42	1.6	1.8	0.0	0.0	1.5	1.7	42
44	0.1	3.4	0.0	0.0	0.1	3.2	44
46	0.0	0.9	0.0	6.4	0.0	1.2	46
48	0.0	0.0	0.0	0.0	0.0	0.0	48
50	0.0	1.0	0.0	0.0	0.0	1.0	50
TOTAL	337.0	663.0	330.2	669.8	336.7	663.3	
NO. SAMPLES		14		3		17	
SAMPLING WEIGHT(Kg)	261	643	21	84	282	727	
NO.F.MEASURED	958	2216	90	278	1048	2494	
MEAN LENGTH(cm)	27.8	28.7	27.1	28.6	27.7	28.7	
MEAN WEIGHT (g)	370	423	332	419	368	423	
MEAN WEIGHT(M+F)		405		390		405	
DEPTH RANGE (m)		50/80		38/238		38/238	

TABLE III-8. YELLOWTAIL FLOUNDER, DIVISION 3NO, 1991: length composition of the gillnet catches.

TABLE XIII : WITCH FLOUNDER, DIVISION 30, 1991:
length composition of the gillnet catches.

JUNE = TOTAL

LENGTH GROUP	M	F	LENGTH GROUP
32	4.0	0.0	32
34	12.1	0.0	34
36	36.4	3.1	36
38	94.0	5.9	38
40	82.0	11.9	40
42	104.2	13.9	42
44	60.7	79.5	44
46	20.7	143.0	46
48	7.8	107.5	48
50	2.2	83.9	50
52	2.2	66.0	52
54	0.0	33.4	54
56	0.0	14.8	56
58	0.0	1.1	58
TOTAL	435.3	584.7	

NO. SAMPLES	16
SAMPLING WEIGHT(kg)	181.7
NO.F.MEASURED	310
MEAN LENGTH(cm)	41.8
MEAN WEIGHT (g)	890
MEAN WEIGHT(M+F)	725
DEPTH RANGE (m)	117/171

TABLE XIV A : COD, DIVISION 3L, 1991: age composition (%) and mean weight (Kg) at age in the trawl catches.

	FEBRUARY	MARCH	APRIL	MAY	JUNE	DEC.-1st Q.	1st QUARTER	2nd QUARTER	TOTAL 1991	
AGE	AGE COMP.	MEAN WEIGHT	AGE COMP.	MEAN WEIGHT	AGE COMP.	MEAN WEIGHT	AGE COMP.	MEAN WEIGHT	AGE COMP.	
2	1.3	0.220	6.5	0.202	12.8	0.204	5.7	0.236	3.4	0.215
3	74.7	0.306	145.3	0.222	166.3	0.297	126.3	0.319	79.0	0.329
4	290.9	0.481	328.7	0.449	407.1	0.413	367.3	0.447	283.9	0.481
5	395.9	0.759	309.8	0.741	282.9	0.796	333.2	0.794	413.1	0.895
6	188.7	1.111	142.5	1.143	80.3	1.213	92.3	1.206	163.3	1.337
7	22.7	1.713	22.3	1.800	9.8	2.274	12.7	2.462	21.8	2.166
8	6.8	2.267	8.4	2.349	8.0	2.930	19.7	3.383	14.6	2.569
9	7.4	2.718	9.6	2.819	7.5	3.403	20.8	3.620	11.4	2.984
10	7.5	3.612	13.7	3.542	3.3	3.216	12.1	4.400	6.3	2.884
11	2.0	3.848	6.6	4.523	1.6	3.942	5.2	5.608	2.6	3.367
12	1.0	3.848	4.7	5.546	0.2	6.602	4.5	7.521	0.4	7.521
13	0.1	4.935	1.1	6.894	0.2	6.137	0.0	0.000	0.0	4.935
14	0.0	0.900	0.3	6.416	0.0	0.000	0.3	10.896	0.0	0.000
15	1.0	11.876	0.5	11.007	0.2	8.805	0.0	0.000	0.0	0.000
16	0.0	0.060	0.2	7.521	0.0	0.000	0.0	0.000	0.1	7.521
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	

NO FISH AGED

619

1516

872

1516

TABLE XIV-B : COD, DIVISION 3M, 1991: age composition (%) and mean weight (kg) at age in the trawl catches.

	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	3rd QUARTER	4th QUARTER	TOTAL 1991
AGE	AGE COMP.	MEAN WEIGHT	AGE COMP.	MEAN WEIGHT	AGE COMP.	MEAN WEIGHT	AGE COMP.	MEAN WEIGHT
1	0.0	0.000	7.0	0.054	0.0	0.000	3.5	0.126
2	36.3	0.219	120.2	0.128	0.3	0.179	113.3	0.243
3	64.7	0.506	109.1	0.587	81.8	0.724	676.5	0.491
4	19.4	1.020	52.3	0.971	86.1	1.004	113.5	0.644
5	580.2	1.882	509.5	1.687	651.3	1.684	78.5	1.449
6	289.6	2.429	196.0	2.319	175.2	2.392	14.1	2.305
7	17.8	3.958	5.8	3.448	5.3	4.802	0.2	5.516
8	7.8	5.210	0.0	0.000	0.0	0.000	0.4	9.103
9	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
10	4.2	6.805	0.0	0.000	0.0	0.000	0.0	0.000
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000

NO FISH AGED

398 458 657

TABLE XIV-C : COD, DIVISION 3N, 1991: age composition (%) and mean weight (kg) at age in the trawl catches.

		APRIL	JUNE	SEPT. = 399.	OCTOBER	NOVEMBER	DECEMBER	2nd QUARTER	4th QUARTER	TOTAL 1991
	AGE	MEAN COMP.	WEIGHT COMP.							
1	0.0	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.079
2	9.2	0.179	0.0	0.000	831.4	0.200	864.3	0.199	241.0	0.280
3	149.3	0.308	8.7	0.428	98.5	0.434	102.1	0.328	323.0	0.556
4	646.5	0.510	96.4	0.733	35.5	0.680	16.1	0.702	284.6	0.818
5	157.3	1.018	526.4	1.377	15.7	1.161	6.8	1.431	124.6	1.243
6	24.8	1.760	254.4	1.719	4.1	1.703	2.0	2.141	20.8	1.983
7	4.9	2.674	24.0	2.942	3.3	3.393	0.5	3.756	1.5	3.029
8	1.9	2.996	13.5	2.946	0.0	0.000	0.3	4.441	0.0	0.000
9	2.4	4.277	37.8	5.623	2.5	3.904	0.2	4.935	0.0	4.935
10	1.2	4.028	14.5	5.012	2.5	3.904	0.2	4.935	4.5	6.805
11	1.6	2.990	7.7	2.884	0.0	0.000	0.0	0.000	0.0	0.000
12	0.8	5.236	7.6	6.137	3.2	14.010	0.0	0.000	0.0	0.000
13	0.0	0.000	0.0	0.000	0.0	0.000	0.1	10.924	0.0	0.000
14	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000
15	0.0	0.000	9.0	20.450	0.0	0.000	0.0	0.000	0.4	20.450
16	0.0	0.000	0.0	0.000	3.2	16.390	0.2	16.390	0.0	0.000
17	0.0	0.000	0.0	0.000	0.0	0.000	0.3	15.744	0.0	0.000
TOTAL		1000	1000	1000	1000	1000	1000	1000	1000	1000

No FISH AGED

180

159 485 824

TABLE XIV-0 : COD, DIVISION 3N, 1991: age composition (%) and mean weight (kg) at age in the gillnet catches.

TOTAL 1991																											
MAY			JUNE			AUGUST			OCTOBER			NOVEMBER			DECEMBER			2nd QUARTER			3rd QUARTER			4th QUARTER			
AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	COMP.	WEIGHT	COMP.	WEIGHT	COMP.	WEIGHT	COMP.	WEIGHT	COMP.	WEIGHT
2	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	
3	1.4	0.480	4.8	0.667	0.0	0.000	9.0	0.000	5.5	0.012	3.0	0.035	2.9	0.729	3.4	0.469	0.0	0.000	3.9	0.636	2.3	0.574	3	0.574			
4	2.1	0.730	4.5	0.845	0.3	0.092	1.1	0.000	20.0	1.156	17.7	1.188	24.3	1.779	3.5	0.688	0.6	0.027	22.4	1.164	7.2	1.064	4	1.064			
5	23.7	1.086	142.0	2.039	401.9	5.015	461.4	2.003	391.7	1.767	371.4	1.826	305.5	1.705	179.7	1.956	419.9	2.010	384.6	1.796	316.2	1.192	5	1.192			
6	670.0	2.650	991.1	2.826	459.4	2.617	463.1	2.528	340.0	2.132	359.1	2.183	358.2	2.156	622.7	2.756	460.3	2.582	332.2	2.181	462.7	2.512	6	2.512			
7	73.5	3.564	107.9	3.819	101.3	3.835	72.0	3.578	188.1	2.834	212.3	2.709	195.4	2.693	93.6	3.728	89.7	3.753	201.2	2.779	148.7	3.187	7	3.187			
8	5.7	0.207	16.8	6.355	12.0	6.186	6.2	5.786	28.1	4.102	26.6	3.911	23.2	3.591	11.0	6.345	9.7	6.077	26.6	3.970	21.3	4.513	8	4.513			
9	6.3	7.158	15.3	7.388	6.8	7.635	2.9	7.386	6.0	8.440	5.0	8.444	9.1	9.072	11.6	7.342	5.2	7.516	4.5	8.431	6.4	7.739	9	7.739			
10	5.0	8.948	13.7	9.080	13.6	8.643	5.0	8.230	3.0	10.074	2.8	9.881	9.1	9.912	10.1	9.061	10.2	8.584	2.4	9.946	7.0	8.956	10	8.956			
11	0.9	8.304	3.5	9.611	4.0	11.078	1.4	11.391	2.0	12.191	1.4	11.491	0.1	9.972	2.4	9.412	3.0	11.138	1.5	11.835	2.2	10.904	11	10.904			
12	0.7	14.045	0.7	11.190	0.6	13.101	0.5	13.999	0.3	11.315	0.2	11.207	0.0	0.000	0.7	13.352	0.6	13.383	0.2	11.260	0.5	12.857	12	12.857			
13	0.5	9.030	1.0	9.615	0.2	12.472	0.3	12.665	0.3	14.572	0.1	14.000	0.0	0.000	0.8	9.470	0.4	12.513	0.2	14.433	0.4	11.338	13	11.338			
14	0.0	12.913	0.2	12.913	0.1	16.390	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.1	12.913	0.0	16.390	0.0	0.000	0.1	16.395	14	16.395			
15	0.0	0.000	0.0	0.000	0.3	6.805	0.2	6.805	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.2	6.805	0.0	0.000	0.1	6.805	15	6.805			
16	0.2	18.917	9.3	16.307	0.0	0.000	0.0	0.000	0.0	0.000	0.1	19.039	0.0	0.000	0.2	17.034	0.0	0.000	0.0	19.029	0.1	17.180	16	17.180			
17	0.1	20.450	0.4	23.578	0.1	21.942	0.0	0.000	0.0	0.000	0.0	0.000	0.3	22.998	0.1	21.942	0.0	0.000	0.1	22.693	0.1	22.693	17	22.693			

卷二

TABLE XIV-E : COD, DIVISION 3NO, 1991: age composition (%) and mean weight (kg) at age in the gillnet catches.

	MAY	JUNE	JULY	AUGUST	SEPTEMBER	2nd QUARTER	3rd QUARTER	TOTAL 1991
AGE	AGE COMP.	MEAN WEIGHT	AGE COMP.	MEAN WEIGHT	AGE COMP.	MEAN WEIGHT	AGE COMP.	MEAN WEIGHT
5	0.0	0.000	6.4	1.905	5.4	2.408	0.0	0.000
6	1.5	3.580	16.1	2.954	18.3	3.646	3.5	4.314
7	8.4	4.394	27.0	3.797	22.1	4.196	8.0	4.970
8	57.1	5.723	83.3	5.084	58.2	6.303	48.6	6.858
9	207.9	6.371	229.3	5.973	180.0	7.428	186.1	7.687
10	328.1	6.600	337.2	6.203	332.9	9.395	352.1	9.389
11	125.6	7.924	115.7	7.368	157.1	10.981	162.5	10.997
12	64.8	9.093	47.8	8.698	90.3	11.975	97.4	12.011
13	67.4	11.069	49.2	10.457	53.3	13.557	56.2	13.589
14	56.8	11.725	39.5	11.071	32.7	14.338	33.6	14.375
15	47.1	13.403	30.2	12.518	19.0	15.560	21.3	15.838
16	20.9	13.487	12.2	13.072	23.7	16.340	25.0	16.621
17	8.6	13.562	5.1	12.604	3.7	17.602	4.2	18.134
18	5.2	18.012	2.7	16.659	3.0	17.058	3.1	17.457
19	0.7	19.028	0.2	19.029	0.1	23.505	0.2	23.505
20	0.0	0.000	0.0	0.000	0.2	19.028	0.3	19.029
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000

No FISH AGED

399 153 1152

TABLE IV-A : REDFISH (Males), DIVISION 3H, 1991: age composition (%) and mean weight (kg) at age in the trawl catches.

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TABLE IV-B : REDFISH (females), DIVISION 3N, 1991: age composition (%) and mean weight (kg) at age in the trawl catches.

	TOTAL 1991																																		
	APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			2nd QUARTER			3rd QUARTER			4th QUARTER	
AGE	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE	MEAN	AGE				
CORP.	WIGHT	COMP.	CORP.	WIGHT	COMP.	CORP.	CORP.	WIGHT	COMP.	CORP.	CORP.	WIGHT	CORP.	WIGHT	CORP.	WIGHT	CORP.	WIGHT	CORP.	WIGHT	CORP.	WIGHT	CORP.	WIGHT	CORP.	WIGHT	CORP.	WIGHT	CORP.	WIGHT					
5	50.0	0.117	25.1	0.124	6.8	0.128	4.1	0.123	4.3	0.122	16.7	0.118	38.0	0.121	40.3	0.118	5.4	0.126	16.6	0.119	21.8	0.119	5												
6	56.3	0.134	75.7	0.153	32.6	0.159	22.2	0.163	20.6	0.160	45.3	0.154	92.6	0.151	63.8	0.142	27.0	0.161	45.6	0.154	48.5	0.150	6												
7	28.7	0.246	71.2	0.229	44.2	0.237	49.5	0.232	65.9	0.232	57.5	0.238	97.9	0.237	45.2	0.236	47.0	0.235	63.6	0.239	56.7	0.238	7												
8	66.6	0.305	92.7	0.398	96.1	0.315	54.9	0.305	126.5	0.304	90.7	0.303	105.6	0.294	76.7	0.302	74.1	0.313	109.3	0.302	96.6	0.303	8												
9	58.8	0.345	94.4	0.336	104.4	0.366	77.6	0.359	108.4	0.345	82.3	0.344	85.2	0.328	61.0	0.342	108.7	0.367	81.8	0.343	82.7	0.346	9												
10	50.3	0.389	47.7	0.377	154.3	0.392	30.4	0.395	86.8	0.374	68.2	0.379	52.1	0.359	49.3	0.385	120.1	0.393	79.2	0.376	69.9	0.381	10												
11	32.1	0.501	24.6	0.498	56.4	0.487	64.5	0.482	24.8	0.486	32.1	0.489	5.5	0.490	29.1	0.500	50.0	0.485	27.8	0.489	30.6	0.491	11												
12	48.4	0.534	35.2	0.525	75.2	0.489	56.3	0.487	31.9	0.486	41.4	0.500	8.1	0.479	43.3	0.531	65.4	0.488	35.9	0.497	41.1	0.505	12												
13	42.5	0.630	27.8	0.625	29.0	0.591	22.0	0.604	11.4	0.590	20.4	0.600	3.1	0.573	36.8	0.629	25.2	0.597	16.7	0.598	23.2	0.611	13												
14	40.2	0.695	25.7	0.701	16.8	0.684	16.9	0.698	6.4	0.697	14.4	0.690	2.7	0.706	34.5	0.689	16.0	0.692	11.5	0.691	16.4	0.695	14												
15	18.2	0.724	11.5	0.721	10.0	0.650	7.0	0.716	3.9	0.663	6.4	0.683	1.4	0.721	15.6	0.679	8.4	0.684	5.4	0.684	8.5	0.703	15												
16+	70.5	0.863	56.3	0.893	30.7	0.944	32.6	0.934	11.1	0.870	23.8	0.860	6.6	0.943	69.9	0.872	31.7	0.938	19.4	0.864	34.5	0.876	16+												
TOTAL	510.5	557.7	695.5	408.5	502.0	507.2	538.8	565.5	500.0	500.0	532.6	532.6																							
No FISH AGED																																			

TABLE XV-C : REDFISH (males), DIVISION 3N, 1991: age composition (%) and mean weight (kg) at age in the gillnet catches.

	MAY	JUNE	JULY = 390.	OCTOBER	NOVEMBER	DECEMBER	2nd QUARTER	4th QUARTER	TOTAL 1991	
AGE	MEAN									
COMP.	WEIGHT									
5	0.0	0.000	0.0	0.000	0.0	0.1	0.144	0.0	0.144	
6	0.5	0.187	0.0	0.000	5.4	0.164	0.0	0.000	2.1	0.166
7	8.9	0.238	3.7	0.255	14.1	0.252	4.4	0.273	9.9	0.264
8	15.0	0.269	6.4	0.268	33.6	0.284	15.7	0.303	31.6	0.296
9	10.2	0.340	5.6	0.380	27.4	0.342	19.1	0.356	27.6	0.338
10	6.5	0.416	15.5	0.466	13.4	0.399	17.6	0.436	15.3	0.408
11	6.5	0.445	24.1	0.474	11.6	0.449	18.3	0.474	13.3	0.466
12	6.9	0.547	25.3	0.529	13.1	0.532	21.7	0.539	11.7	0.521
13	8.1	0.637	17.3	0.573	8.4	0.575	16.5	0.607	10.8	0.602
14	10.7	0.665	20.2	0.610	8.5	0.608	20.5	0.625	12.5	0.630
15	18.1	0.684	24.2	0.560	11.0	0.634	33.2	0.690	17.0	0.701
16+	30.9	0.790	39.7	0.897	14.7	0.791	112.3	0.987	65.0	0.987
TOTAL	122.4	181.9	161.3	279.3	217.7	115.9	140.5	218.9	155.6	

No FISH AGED

641

TABLE XV-D : REDFISH (females), DIVISION 3N, 1991: age composition (%) and mean weight (Kg) at age in the gillnet catches.

	MAY	JUNE	JULY = 390.	OCTOBER	NOVEMBER	DECEMBER	2nd QUARTER	4th QUARTER	TOTAL 1991
AGE	MEAN COMP.	AGE MEAN WEIGHT COMP.	AGE MEAN WEIGHT COMP.	AGE MEAN WEIGHT COMP.	AGE MEAN WEIGHT COMP.	AGE MEAN WEIGHT COMP.	MEAN COMP.	MEAN COMP.	
5	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0
6	0.4	0.200	1.0	0.216	0.0	0.000	1.2	0.177	0.0
7	6.4	0.259	3.3	0.225	1.0	0.341	7.6	0.275	9.1
8	12.4	0.291	12.9	0.309	12.9	0.347	26.7	0.305	26.1
9	7.7	0.338	10.2	0.336	52.4	0.387	34.3	0.364	32.1
10	9.7	0.457	12.4	0.443	85.2	0.434	37.8	0.406	32.4
11	13.5	0.516	18.5	0.501	81.3	0.505	19.2	0.508	35.2
12	30.3	0.586	42.4	0.598	136.3	0.544	41.2	0.573	50.4
13	49.9	0.671	78.8	0.663	129.8	0.630	65.0	0.666	48.8
14	74.6	0.735	101.9	0.724	128.4	0.690	87.0	0.714	58.3
15	50.4	0.813	51.6	0.773	47.4	0.693	43.2	0.789	38.0
16+	622.3	1.008	405.1	1.097	163.9	0.800	358.6	1.019	450.8
TOTAL	877.6	918.1	838.7	720.7	782.3	884.1	859.5	781.1	844.4

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No FISH AGED

639

TABLE XVI-A : AMERICAN PLAICE , DIVISION 3L, 1991: age composition (%) and mean weight (Kg) at age in the trawl catches.

MALES MARCH = TOTAL			FEMALES MARCH = TOTAL		
AGE	AGE	MEAN COMP.	AGE	AGE	MEAN COMP.
		WEIGHTH			WEIGHTH
4	0.0	0.000	4	0.9	0.365
5	37.4	0.258	5	26.2	0.285
6	161.7	0.381	6	131.6	0.418
7	87.1	0.492	7	158.8	0.833
8	41.8	0.521	8	152.3	0.756
9	8.7	0.713	9	47.3	0.873
10	1.7	0.816	10	93.2	1.035
11	1.1	0.780	11	34.1	1.110
12	0.0	0.000	12	4.1	1.530
13	0.0	0.000	13	7.5	1.420
14	0.0	0.000	14	6.0	1.631
15	0.0	0.000	15	7.1	1.577
16	0.0	0.000	16	1.5	1.631
TOTAL	349.4		TOTAL	850.6	
No FISH AGED 346			No FISH AGED 440		

TABLE XVI-B : AMERICAN PLAICE (males), DIVISION 3M, 1991:
age composition (%) and mean weight (Kg)
at age in the trawl catches.

4th QUARTER			TOTAL 1991		
AGE	AGE	MEAN COMP.	AGE	MEAN COMP.	AGE
		WEIGHTH			WEIGHTH
4	6.0	0.330	10.7	0.352	4
5	44.5	0.469	55.5	0.449	5
6	25.0	0.538	28.2	0.535	6
7	42.7	0.700	42.9	0.691	7
8	43.6	0.773	41.9	0.755	8
9	9.9	0.863	9.3	0.832	9
10	17.3	0.889	13.0	0.883	10
TOTAL	189.9		201.5		
No FISH AGED			500		

TABLE XVI-C : AMERICAN PLAICE (females), DIVISION 3M, 1991:
age composition (%) and mean weight (Kg)
at age in the trawl catches.

4th QUARTER			TOTAL 1991		
AGE	AGE	MEAN COMP.	AGE	MEAN COMP.	AGE
		WEIGHTH			WEIGHTH
3	8.1	0.147	5.8	0.147	3
4	32.9	0.339	23.8	0.339	4
5	180.1	0.473	129.1	0.473	5
6	84.8	0.682	66.1	0.703	6
7	202.1	0.853	230.4	0.982	7
8	172.1	1.102	197.5	1.102	8
9	100.0	1.281	113.9	1.280	9
10	23.3	1.372	28.0	1.385	10
11	3.0	1.477	3.6	1.477	11
12	3.7	1.880	2.6	1.880	12
TOTAL	810.1		798.5		
No FISH AGED			530		

TABLE XVI-D : AMERICAN PLAICE (males), DIVISION 3N, 1991: age composition (%)
and mean weight (kg) at age in the trawl catches.

AGE COMP.	SEP. = 3rd Q.			OCTOBER			NOVEMBER			DECEMBER			4TH QUARTER			TOTAL 1991		
	MEAN WEIGHT	MEAN COMP.	AGE MEAN	MEAN WEIGHT														
2	0.0	0.000	0.9	0.036	0.3	0.046	0.0	0.000	0.6	0.038	0.5	0.038	2	0.5	0.038	2		
3	0.0	0.000	24.9	0.090	12.9	0.087	0.5	0.115	18.2	0.089	16.3	0.089	3	16.3	0.089	3		
4	0.0	0.000	46.9	0.108	25.0	0.108	2.7	0.138	34.7	0.108	31.1	0.108	4	31.1	0.108	4		
5	38.2	0.280	116.1	0.187	92.7	0.205	42.4	0.241	100.7	0.195	94.1	0.199	5	94.1	0.199	5		
6	141.3	0.347	130.5	0.266	153.1	0.310	130.6	0.358	136.9	0.292	139.2	0.298	6	139.2	0.298	6		
7	64.6	0.457	34.1	0.453	63.1	0.493	80.7	0.515	49.1	0.481	50.7	0.478	7	50.7	0.478	7		
8	23.1	0.510	13.9	0.505	26.7	0.558	39.5	0.643	21.0	0.554	21.2	0.549	8	21.2	0.549	8		
9	5.1	0.703	7.2	0.832	14.8	0.783	18.4	0.817	11.0	0.805	10.4	0.800	9	10.4	0.800	9		
10	0.3	0.668	2.7	0.916	5.6	1.002	10.4	1.080	4.5	1.010	4.1	1.007	10	4.1	1.007	10		
11	0.3	0.668	2.1	0.918	4.1	0.997	7.7	1.034	3.4	1.011	3.0	1.007	11	3.0	1.007	11		
12	0.0	0.000	0.5	1.266	3.3	1.617	13.4	1.712	2.7	1.626	2.4	1.626	12	2.4	1.626	12		
13	0.0	0.000	0.7	1.019	0.7	1.067	1.4	1.011	0.8	1.064	0.7	1.064	13	0.7	1.064	13		
14	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	14	0.0	0.000	14		
15	0.0	0.000	0.1	1.457	0.3	1.457	0.8	1.457	0.2	1.457	0.2	1.457	15	0.2	1.457	15		
TOTAL	272.9		380.6		402.6		348.5		385.8		373.9							
NO FISH AGED														346		346		

TABLE XVI-E: AMERICAN PLAICE (females), DIVISION 3N, 1991: age composition (%) and mean weight (kg) at age in the trawl catches.

TOTAL 1991													
4th QUARTER					1st QUARTER								
NOVEMBER					OCTOBER								
DECEMBER					SEP. = 3rd Q.								
AGE COMP.	AGE WEIGHT	MEAN COMP.	MEAN WEIGHT	AGE COMP.	MEAN COMP.	MEAN WEIGHT	AGE COMP.	MEAN COMP.	AGE COMP.				
2	3.6	0.016	1.7	0.046	0.7	0.046	0.0	0.000	1.2	0.046	1.1	0.046	2
3	58.1	0.081	22.2	0.080	10.3	0.081	3.5	0.089	16.1	0.081	14.4	0.081	3
4	206.8	0.114	89.3	0.125	48.3	0.135	21.5	0.153	67.9	0.128	61.4	0.131	4
5	210.9	0.111	158.1	0.206	130.8	0.219	78.7	0.245	140.8	0.213	135.2	0.219	5
6	169.0	0.249	204.4	0.306	206.6	0.328	184.3	0.358	202.6	0.319	215.4	0.328	6
7	52.1	0.409	74.1	0.437	90.2	0.481	107.6	0.551	83.1	0.468	91.5	0.476	7
8	11.9	0.751	26.1	0.707	41.3	0.726	84.7	0.776	37.0	0.729	41.3	0.720	8
9	3.8	0.792	7.0	0.868	12.5	0.814	30.5	0.922	11.2	0.884	12.0	0.879	9
10	2.5	0.802	10.8	0.945	18.5	0.953	40.6	1.022	16.4	0.966	17.2	0.956	10
11	0.3	0.886	3.0	1.271	6.5	1.313	21.5	1.261	6.0	1.284	6.2	1.281	11
12	0.0	0.000	2.8	1.685	6.7	1.603	17.0	1.547	5.6	1.610	5.6	1.594	12
13	0.0	0.000	3.8	1.633	7.6	1.552	23.9	1.460	7.1	1.547	6.9	1.537	13
14	0.0	0.000	2.2	1.811	4.5	1.745	10.1	1.719	3.8	1.760	3.6	1.753	14
15	0.0	0.000	4.8	1.995	6.5	1.839	15.2	1.683	6.4	1.868	5.9	1.855	15
16	0.0	0.000	3.3	2.089	4.9	1.882	8.8	1.747	4.4	1.941	4.2	1.915	16
17	0.0	0.000	4.5	2.565	2.1	2.369	2.7	2.103	3.5	2.488	3.1	2.488	17
18	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	18
19	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	19
20+	0.0	0.000	1.3	2.344	1.4	2.575	0.9	2.140	1.3	2.425	1.2	2.425	20+

NO FISH AGE

440

TABLE XVI-F : AMERICAN PLAICE (males), DIVISION 3W, 1991: age composition (%) and mean weight (kg) at age in the gillnet catches.

	AGE	AGE COMP.	MEAN WEIGHT	JUNE			OCTOBER			NOVEMBER			DECEMBER			2nd QUARTER			4th QUARTER			TOTAL 1991		
				MEAN COMP.	WEIGHT	MEAN COMP.	WEIGHT	MEAN COMP.	WEIGHT	MEAN COMP.	WEIGHT	MEAN COMP.	WEIGHT	MEAN COMP.	WEIGHT	MEAN COMP.	WEIGHT	MEAN COMP.	WEIGHT	MEAN COMP.	WEIGHT	MEAN COMP.	WEIGHT	
3	15.0	0.243	3.5	0.294	27.5	0.207	16.7	0.200	34.4	0.241	4.4	0.281	20.7	0.213	5.1	0.269	3							
4	43.8	0.335	22.8	0.361	35.3	0.296	28.5	0.323	84.6	0.281	24.4	0.358	39.0	0.305	25.0	0.354	4							
5	303.1	0.467	222.3	0.490	186.5	0.439	249.6	0.455	215.6	0.416	228.6	0.485	237.9	0.461	239.0	0.483	5							
6	80.8	0.482	73.5	0.531	44.0	0.485	59.9	0.506	45.6	0.405	74.1	0.527	56.0	0.490	73.3	0.526	6							
7	60.7	0.791	90.6	0.758	19.8	0.699	32.3	0.646	5.6	0.522	88.3	0.760	26.5	0.662	85.7	0.758	7							
8	25.4	0.883	44.5	0.830	8.3	0.800	12.4	0.718	0.0	0.000	43.0	0.890	9.8	0.724	41.6	0.829	8							
9	13.0	0.755	30.3	0.796	3.5	0.785	8.0	0.754	0.0	0.000	29.0	0.795	6.2	0.756	28.0	0.794	9							
10	8.7	1.142	8.5	0.827	9.9	1.227	1.8	0.796	0.0	0.000	8.5	0.852	2.2	0.910	8.3	0.853	10							
11	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	11							
12	6.3	1.298	0.0	0.000	24.4	1.418	0.0	0.000	0.0	0.000	0.5	1.298	2.2	1.418	0.6	1.218	12							
TOTAL	557.0		496.2		359.2		409.1		365.8		500.9		400.5		496.6									

NO FISH AGED

179

TABLE XVI-G : AMERICAN PLAICE (females), DIVISION 3N, 1991: age composition (%) and mean weight (kg) at age in the gillnet catches.

	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	2nd QUARTER	4th QUARTER	TOTAL 1991	
AGE COMP.	AGE MEAN WEIGHT											
4	13.7	0.305	2.5	0.436	0.0	0.000	1.0	0.436	2.5	0.436	3.4	0.395
5	32.6	0.580	105.7	0.513	90.4	0.649	105.2	0.661	165.3	0.657	100.0	0.515
6	11.4	0.669	33.8	0.719	49.6	0.760	60.6	0.768	76.7	0.730	32.1	0.717
7	20.3	1.088	43.1	0.920	65.4	0.898	78.0	0.986	81.9	0.858	41.3	0.926
8	37.1	1.135	43.8	1.035	56.0	1.093	52.2	1.017	55.8	0.919	43.3	1.060
9	55.5	1.310	43.2	1.216	53.2	1.261	41.8	1.274	29.2	1.269	44.1	1.279
10	61.1	1.324	59.7	1.291	79.2	1.321	71.4	1.188	65.1	1.092	59.8	1.294
11	74.3	1.386	56.7	1.359	69.8	1.369	62.2	1.281	52.0	1.193	58.1	1.362
12	110.4	1.317	89.1	1.278	126.2	1.428	96.9	1.243	81.6	1.187	90.6	1.281
13	14.5	1.542	13.1	1.592	22.9	1.646	10.5	1.587	3.1	1.410	13.2	1.579
14	8.0	1.588	8.2	1.614	15.2	1.687	6.6	1.624	1.1	1.298	8.2	1.610
15	2.7	1.674	3.2	1.614	6.3	1.674	2.0	1.674	0.0	0.000	3.2	1.674
16	0.0	0.000	0.0	0.000	1.8	2.118	0.7	2.118	0.0	0.000	0.0	2.118
17	1.3	1.674	1.6	1.674	4.9	1.832	1.7	1.859	0.0	0.000	1.6	1.674
TOTAL	443.0	503.8		640.8			590.9		614.2		499.1	509.5

NO FISH AGED

256

503.4

TABLE XVI-H : AMERICAN PLAICE (Wales), DIVISION 3NQ, 1991: age composition (%) and mean weight (Kg) at age in the gillnet catches.

NO FISH AGED

51

6

2

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TABLE XVI-I : AMERICAN PLAICE (females), DIVISION 3NO, 1991: age composition (%)
and mean weight (Kg) at age in the gillnet catches.

	AGE	AGE COMP.	MEAN WEIGHT	MEAN COMP.	AGE	MEAN WEIGHT	MEAN COMP.	AGE	MEAN WEIGHT	MEAN COMP.	AGE	MEAN WEIGHT	MEAN COMP.	TOTAL 1991		
5	0.0	0.000	0.0	0.000	2.9	0.326	6.7	0.308	3.8	0.345	0.0	0.000	4.5	0.319	2.7	0.319
6	31.3	0.419	22.2	0.448	31.8	0.429	46.0	0.417	33.1	0.413	21.9	0.437	37.2	0.421	34.2	0.430
7	109.7	0.518	107.6	0.563	87.0	0.554	113.3	0.551	75.3	0.546	108.2	0.549	94.6	0.552	110.0	0.551
8	155.2	0.541	161.6	0.582	95.9	0.640	103.3	0.631	74.9	0.638	158.8	0.570	90.3	0.636	122.5	0.604
9	84.1	0.633	109.8	0.653	72.8	0.798	83.0	0.767	69.4	0.848	102.3	0.668	75.9	0.794	87.8	0.727
10	111.3	0.816	176.4	0.822	60.2	0.917	62.0	0.880	74.2	1.001	157.3	0.821	63.3	0.921	100.6	0.858
11	59.3	0.916	87.6	0.915	64.2	1.061	61.8	1.034	91.6	1.178	79.3	0.915	68.1	1.080	74.0	0.990
12	32.8	0.953	41.4	0.947	31.3	1.270	29.2	1.277	50.0	1.367	38.9	0.949	33.8	1.297	34.7	1.158
13	9.0	1.354	9.3	1.243	21.7	1.395	19.8	1.495	41.0	1.514	9.2	1.274	24.6	1.460	17.0	1.416
14	6.1	1.924	6.1	1.722	11.0	1.703	14.0	1.792	29.9	1.932	6.1	1.781	15.4	1.811	11.0	1.793
15	7.4	2.126	5.6	1.872	11.5	1.932	13.5	1.964	28.6	2.030	6.2	1.961	15.2	1.975	10.9	1.983
16	4.6	2.329	2.4	2.210	7.3	1.860	9.2	1.921	18.1	1.981	3.1	2.262	9.9	1.920	6.5	2.018
17	4.3	2.262	2.4	1.909	7.3	2.166	11.3	2.313	25.4	2.267	3.0	2.051	12.0	2.255	7.4	2.223
18	2.6	2.512	2.6	3.342	5.2	2.405	8.0	2.327	16.8	2.255	2.6	3.118	8.3	2.324	5.2	2.528
19	1.5	2.465	0.3	2.465	1.2	2.277	2.0	2.211	6.4	2.256	0.7	2.465	2.4	2.247	1.5	2.317
20+	6.8	2.967	2.5	2.962	4.8	2.537	6.0	2.844	11.4	2.447	3.8	2.985	6.4	2.614	5.2	2.738
TOTAL	625.9		738.0		506.1		589.2		650.6		705.1		562.0		631.2	
No FISH AGED															360	581

TABLE XVII-A : YELLOWTAIL FLOUNDER (males), DIVISION 3NO, 1991; age composition (%) and mean weight (kg) at age in the gillnet catches.

	MAY			JUNE			JULY			AUGUST			SEPTEMBER			2nd QUARTER			3rd QUARTER			TOTAL 1991		
	AGE COMP.	AGE WEIGHT	MEAN COMP.	AGE COMP.	MEAN WEIGHT																			
4	1.4	0.502	0.3	0.502	1.9	0.502	2.8	0.502	2.5	0.502	1.0	0.502	2.3	0.502	4									
5	50.8	0.632	43.1	0.880	37.6	0.658	37.8	0.628	35.2	0.598	47.9	0.715	37.3	0.637	5									
6	300.8	0.647	229.7	0.867	231.1	0.663	244.7	0.621	213.9	0.594	274.2	0.716	236.3	0.636	6									
7	75.9	0.763	265.2	1.130	113.5	0.941	85.7	0.938	53.8	0.863	146.6	1.011	93.0	0.932	7									
8	20.3	1.188	210.8	1.316	51.7	1.225	46.7	1.299	21.4	1.228	91.5	1.298	44.0	1.254	8									
9	8.7	1.151	101.2	1.223	25.6	1.203	20.0	1.248	10.2	1.206	43.3	1.214	20.9	1.220	9									
10	2.3	1.300	53.3	1.309	12.0	1.272	10.2	1.460	4.2	1.202	21.3	1.308	10.0	1.341	10									
11	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	11									
12	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.000	12									
TOTAL	460.2		903.7		480.2		446.2		341.1		625.8		644.3		451.5									
No FISH AGED																								

No FISH AGED

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TABLE XVII-B : YELLOWTAIL FLOUNDER (females), DIVISION 3NO, 1991; age composition (%) and mean weight (kg) at age in the gillnet catches.

	MAY			JUNE			JULY			AUGUST			SEPTEMBER			2nd QUARTER			3rd QUARTER			TOTAL 1991		
	AGE COMP.	AGE WEIGHT	MEAN COMP.	AGE COMP.	MEAN WEIGHT																			
5	31.2	0.667	1.1	0.701	15.6	0.685	27.4	0.623	31.4	0.643	20.0	0.668	22.8	0.647	5									
6	331.3	0.683	18.8	0.819	171.2	0.731	280.4	0.652	330.0	0.669	214.6	0.687	240.6	0.682	6									
7	105.1	0.813	24.4	1.153	114.8	1.039	101.3	0.936	123.1	0.937	75.0	0.854	111.6	0.883	7									
8	35.1	1.214	28.9	1.534	110.7	1.436	72.5	1.385	88.4	1.336	32.0	1.315	92.3	1.389	8									
9	16.3	1.979	13.2	1.578	56.7	1.608	38.3	1.636	42.5	1.599	15.1	1.849	47.3	1.615	9									
10	14.1	1.239	10.7	1.569	39.6	1.526	28.3	1.496	34.2	1.496	12.8	1.342	34.4	1.512	10									
11	5.6	2.269	1.2	1.746	7.2	2.134	4.7	1.971	4.9	2.238	4.0	2.211	5.9	2.097	11									
12	1.1	2.104	0.0	0.000	0.7	2.104	0.8	2.104	0.4	2.104	0.7	2.104	0.7	2.104	12									
TOTAL	\$39.8		96.3		519.8		653.0		374.2		655.7													
No FISH AGED																								

No FISH AGED

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399

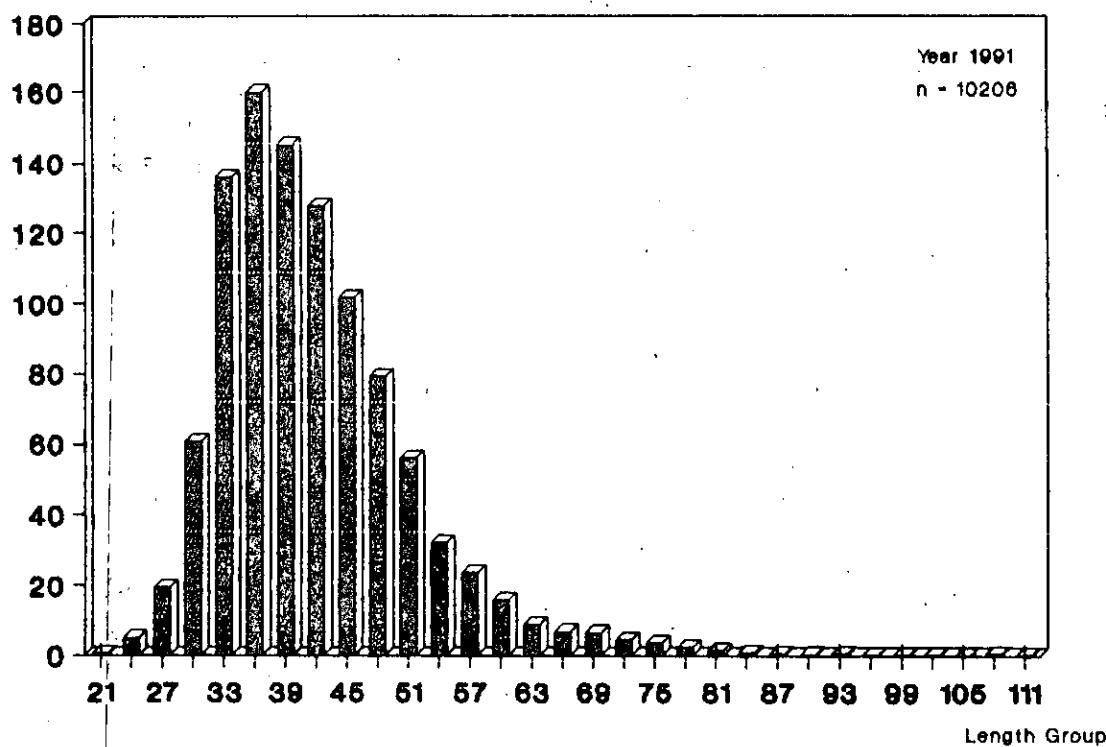


Fig. 1 - Annual lenght composition of Cod in Division 3L, trawl fishery in 1991.

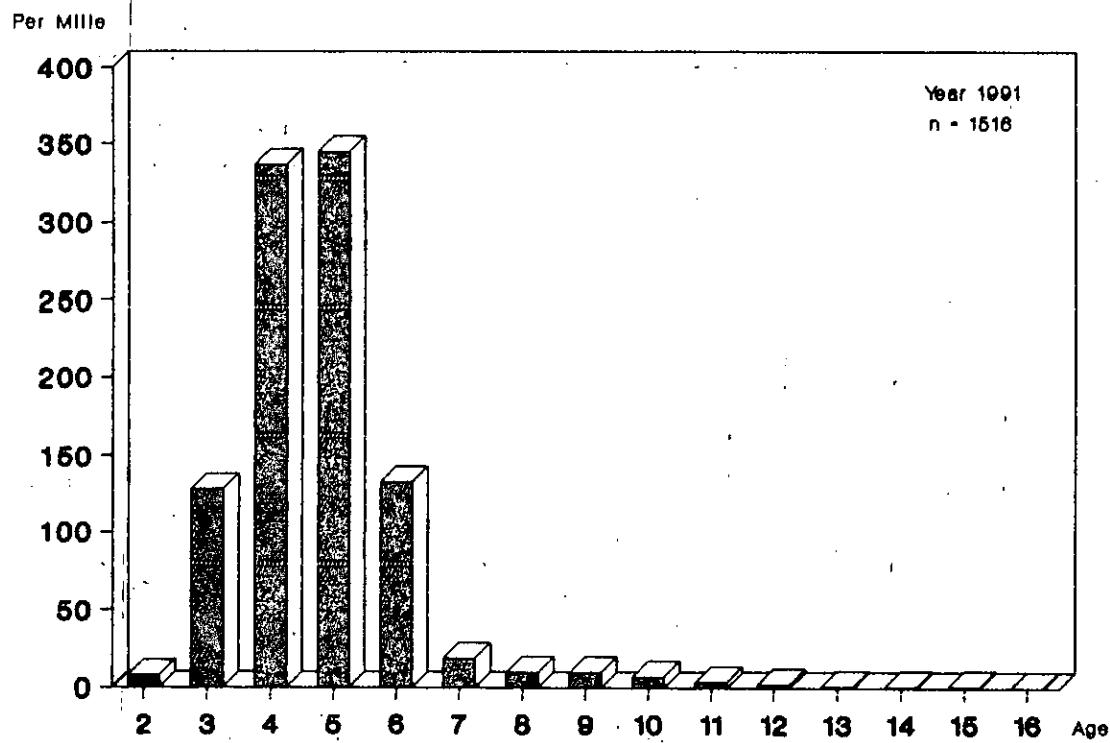


Fig. 2 - Annual age composition of Cod in Division 3L, trawl fishery in 1991.

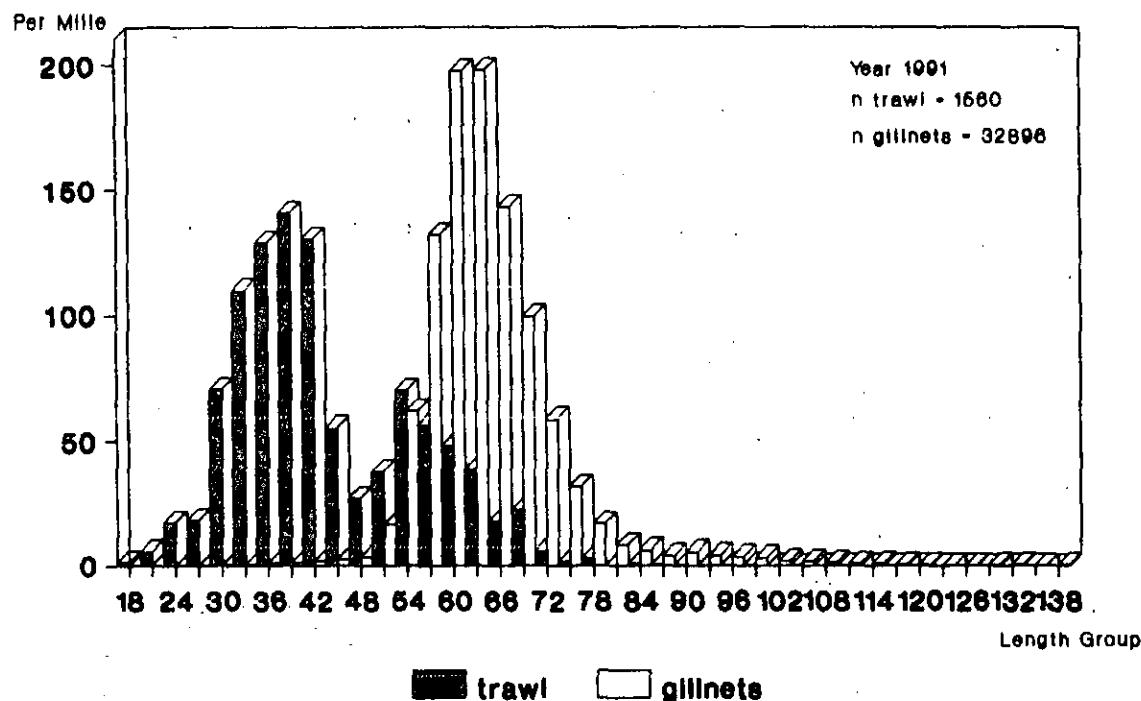


Fig. 3 - Annual lenght composition of Cod in Division 3M, trawl and gillnets fishery in 1991.

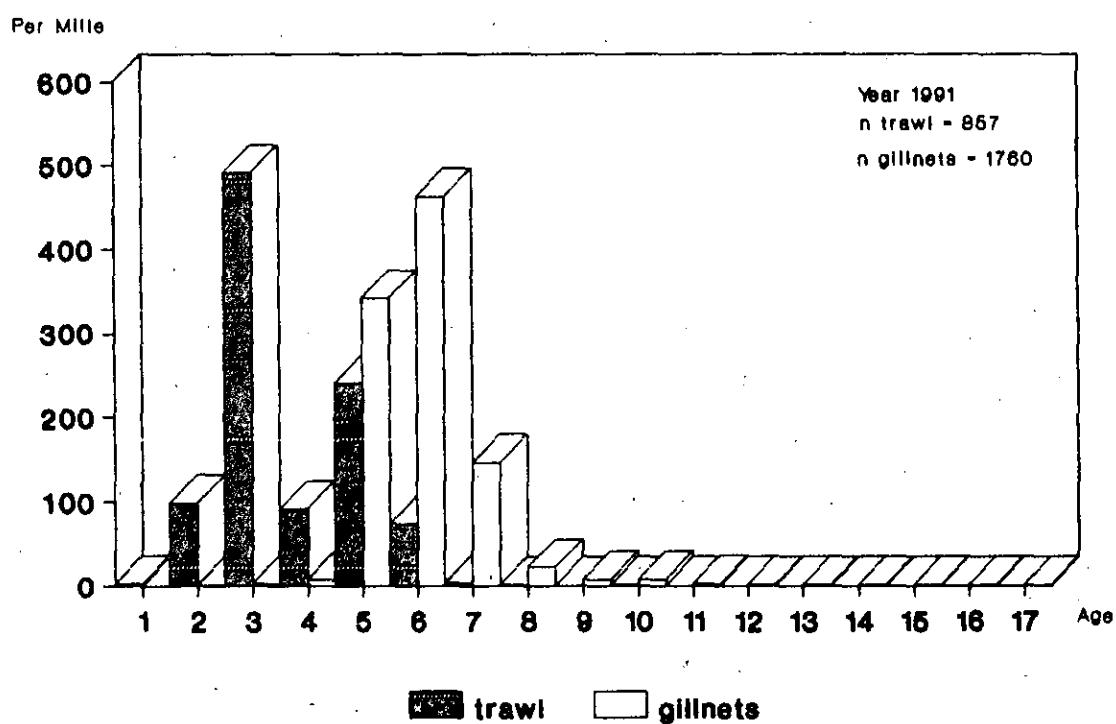


Fig. 4 - Annual age composition of Cod in Division 3M, trawl and gillnets fishery in 1991.

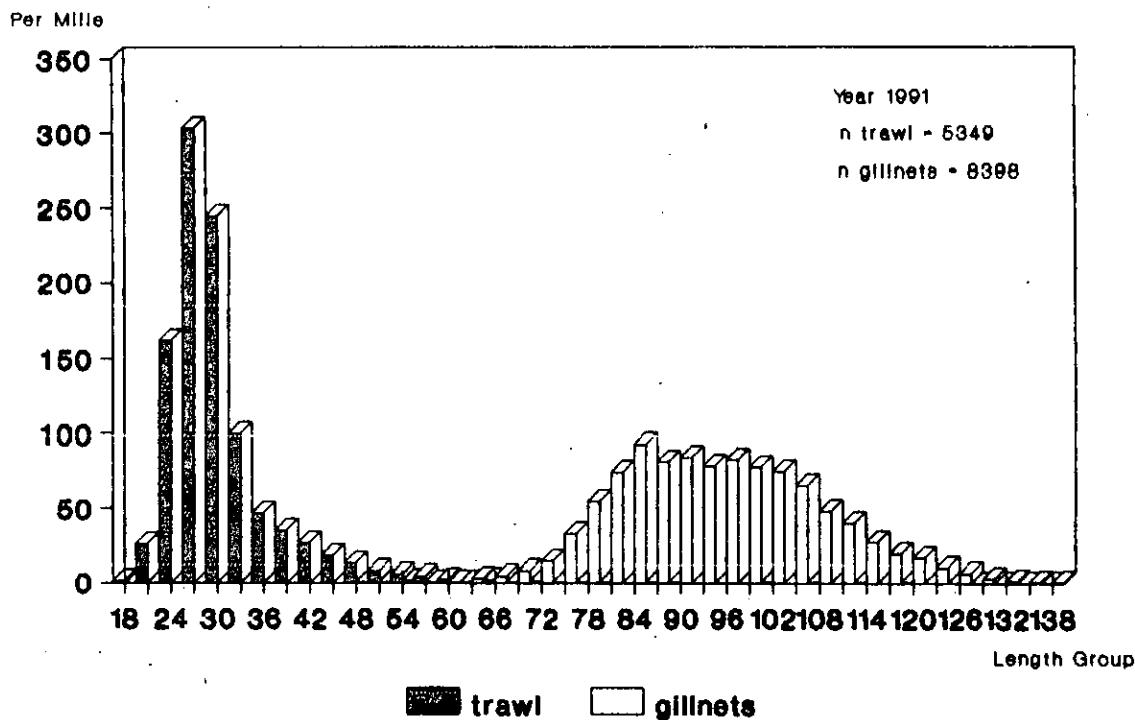


Fig. 5 - Annual length composition of Cod in Division 3NO, trawl and gillnets fishery in 1991.

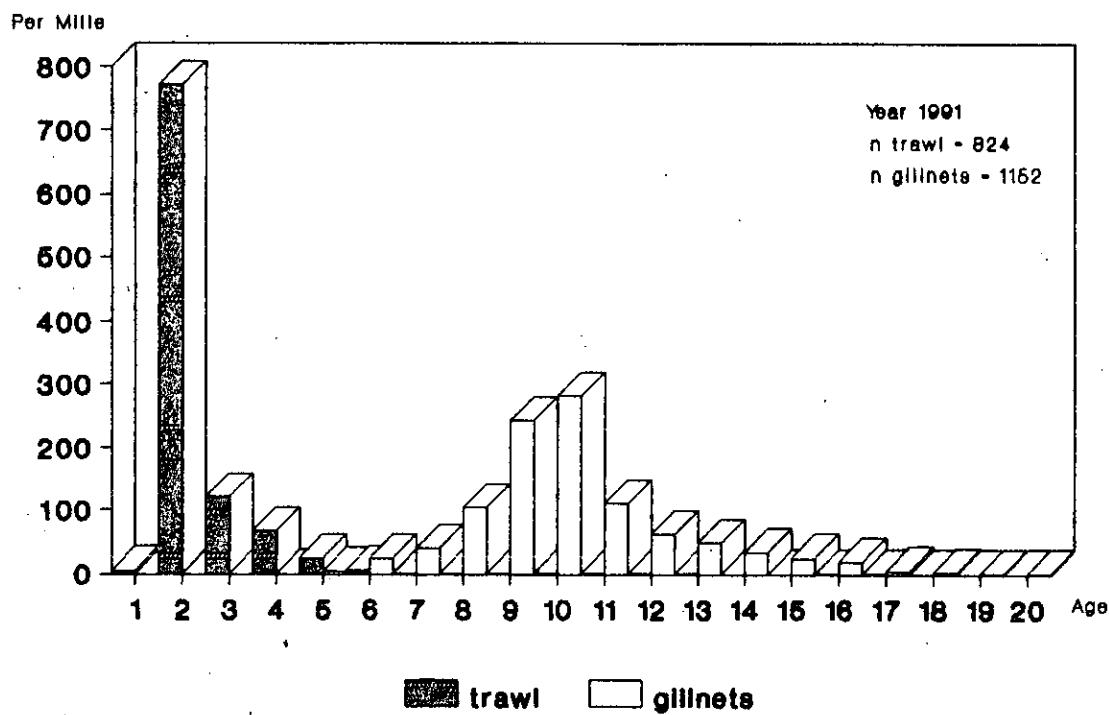


Fig. 6 - Annual age composition of Cod in Division 3NO, trawl and gillnets fishery in 1991.

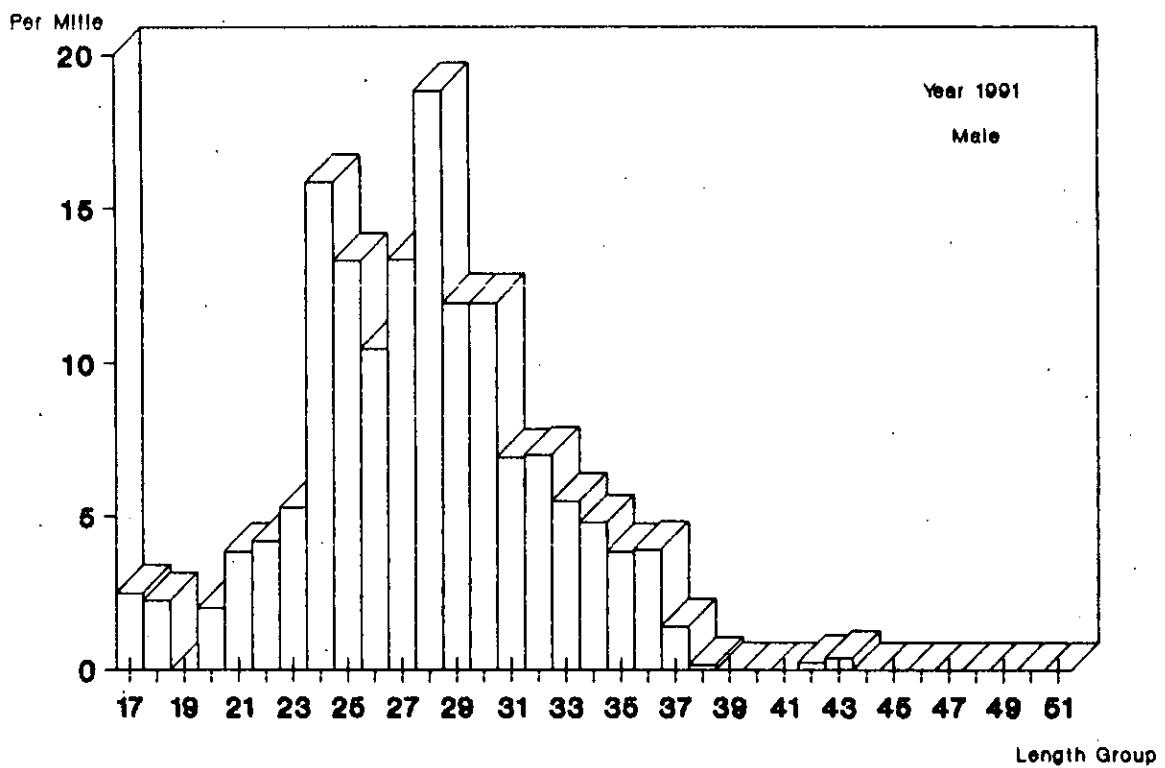


Fig. 7 - Annual length composition of Redfish, *S. mentella* (male) in Division 3L, trawl fishery in 1991.

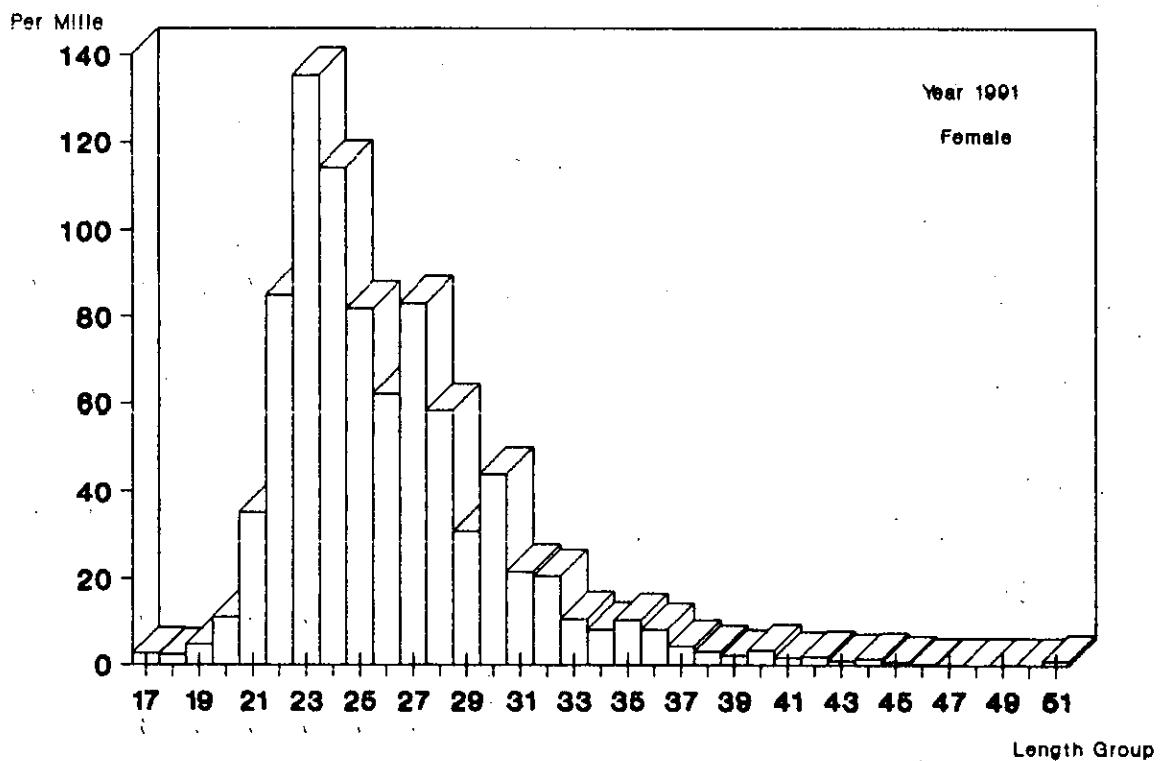


Fig. 8 - Annual length composition of Redfish, *S. mentella* (female) in Division 3L, trawl fishery in 1991.

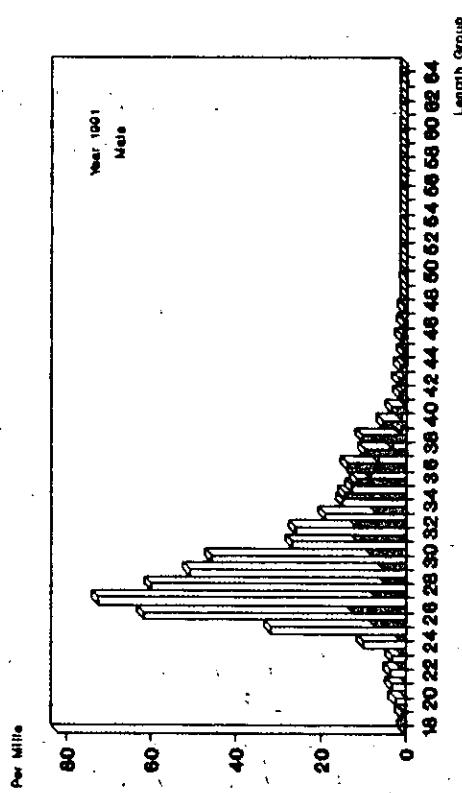


Fig. 9 - Annual length composition of Redfish, *S. mentella* (male) in Division 3M, trawl and gillnets fishery in 1991.

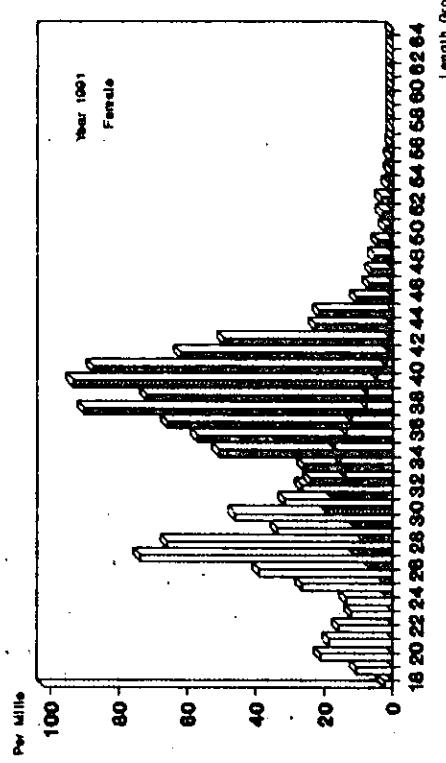


Fig. 10 - Annual length composition of Redfish, *S. mentella* (female) in Division 3M, trawl and gillnets fishery in 1991.

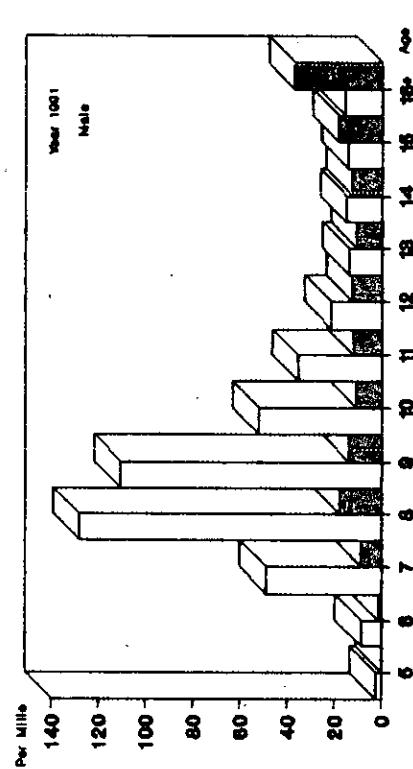


Fig. 11 - Annual age composition of Redfish, *S. mentella* (male) in Division 3M, trawl and gillnets fishery in 1991.

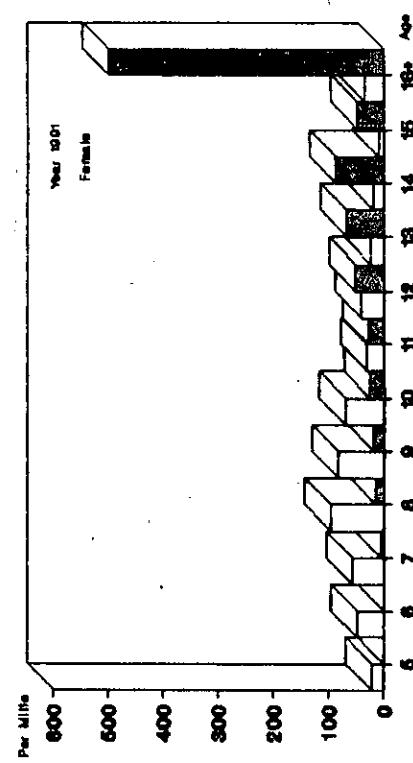


Fig. 12 - Annual age composition of Redfish, *S. mentella* (female) in Division 3M, trawl and gillnets fishery in 1991.

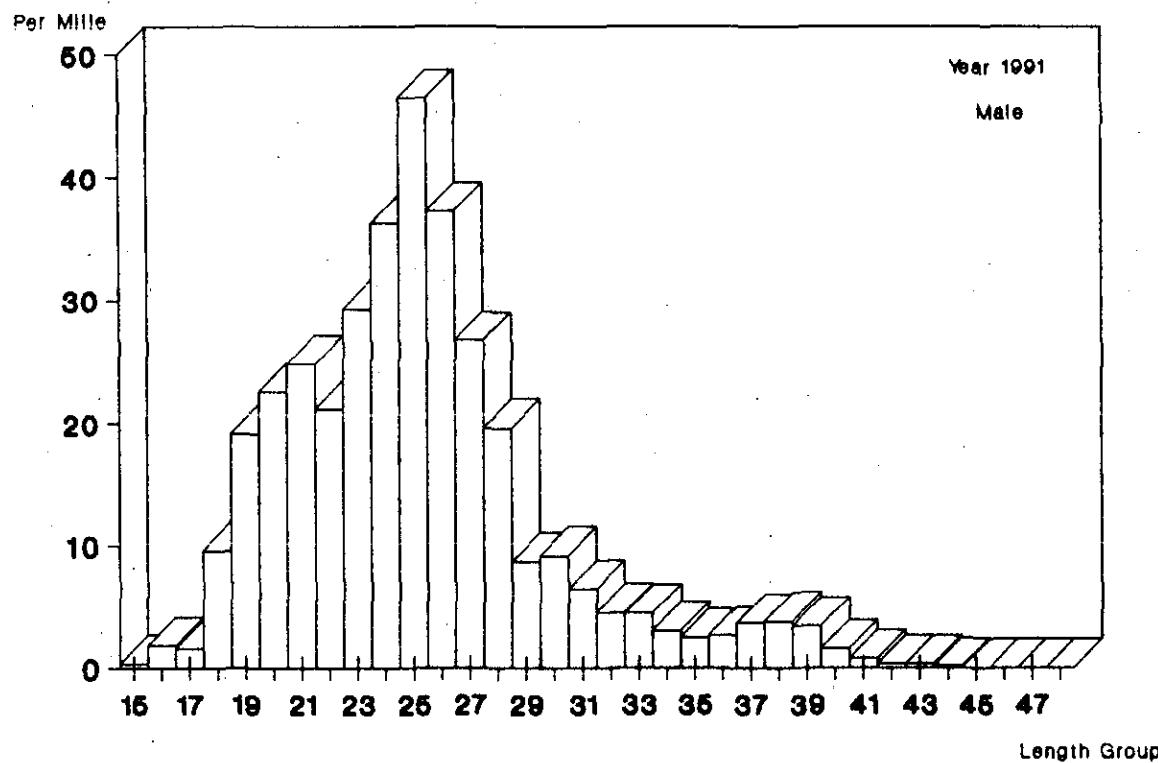


Fig. 13 - Annual length composition of Redfish, *S. mentella* (male) in Division 3N, trawl fishery in 1991.

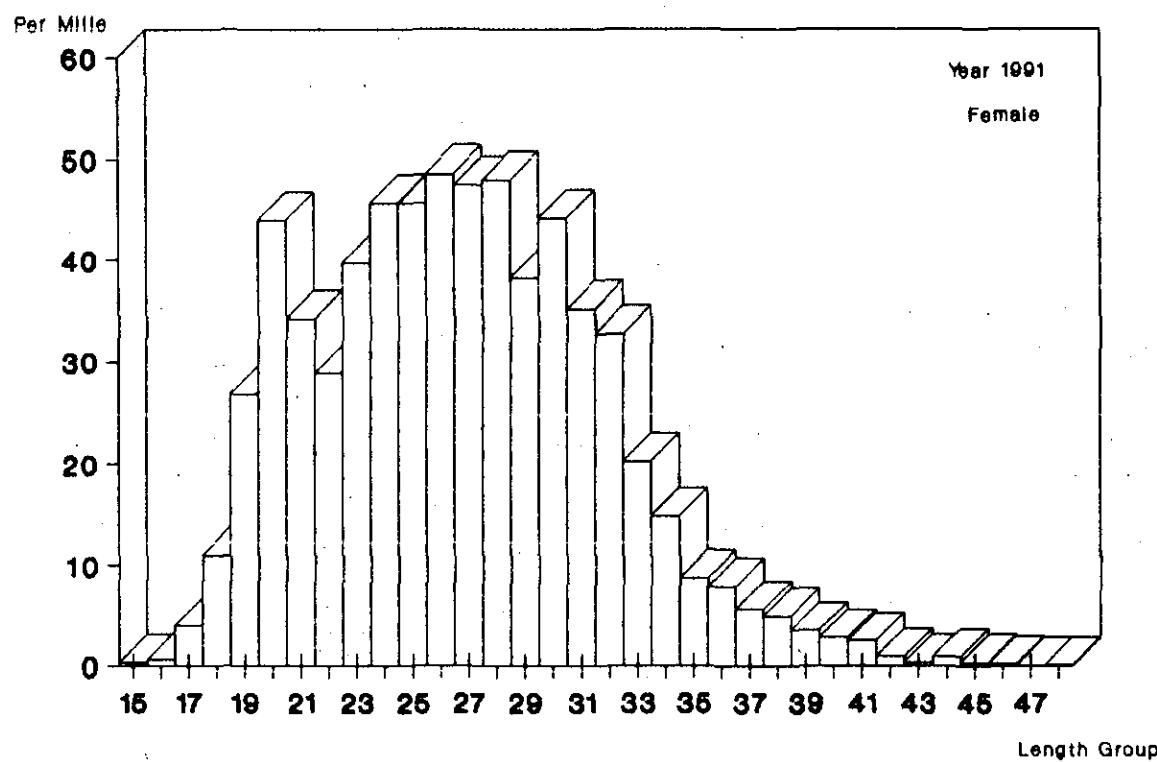


Fig. 14 - Annual length composition of Redfish, *S. mentella* (female) in Division 3N, trawl fishery in 1991.

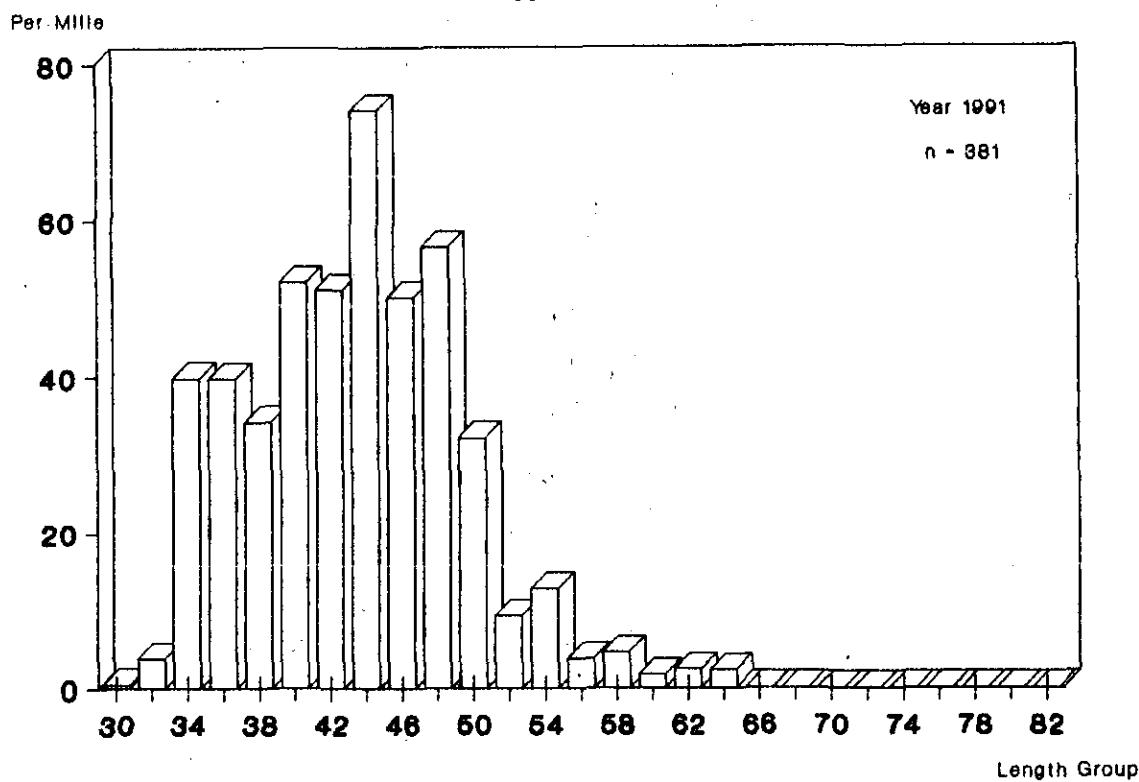


Fig. 15 - Length composition of Greenland halibut, (male) in division 3L for 2nd quarter, trawl fishery in 1991.

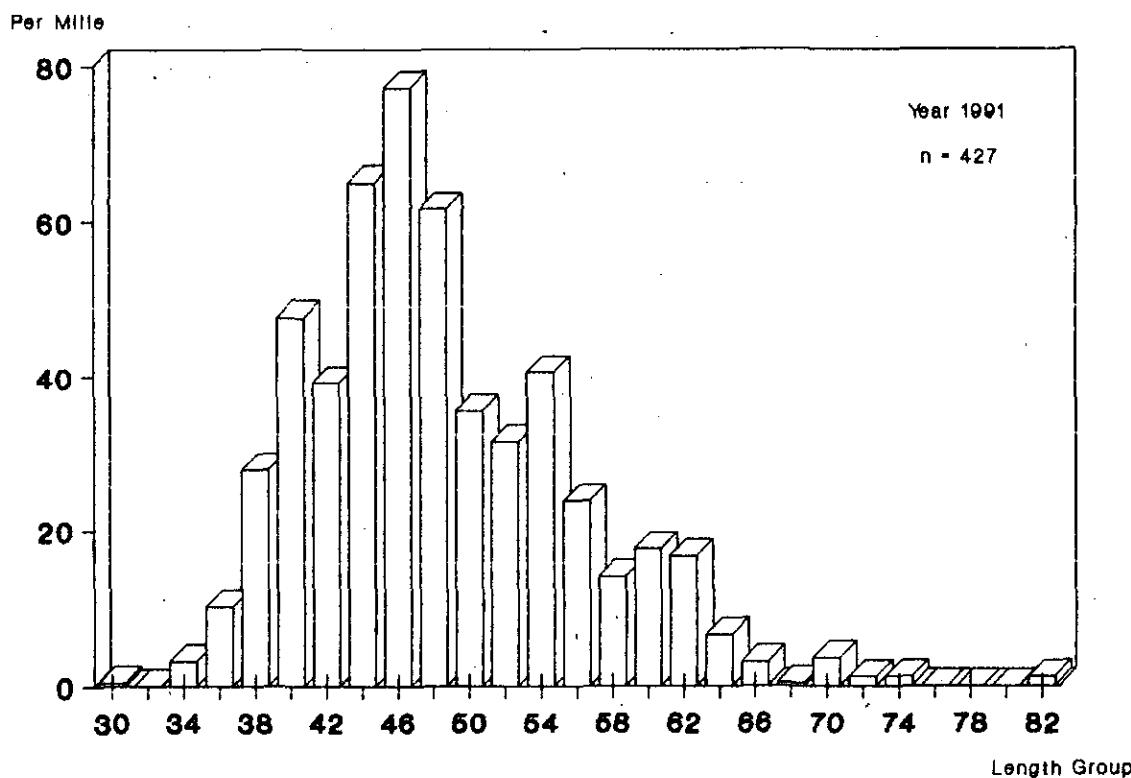


Fig. 16 - Length composition of greenland halibut, (females) in Division 3L for 2nd quarter, trawl fishery in 1991.

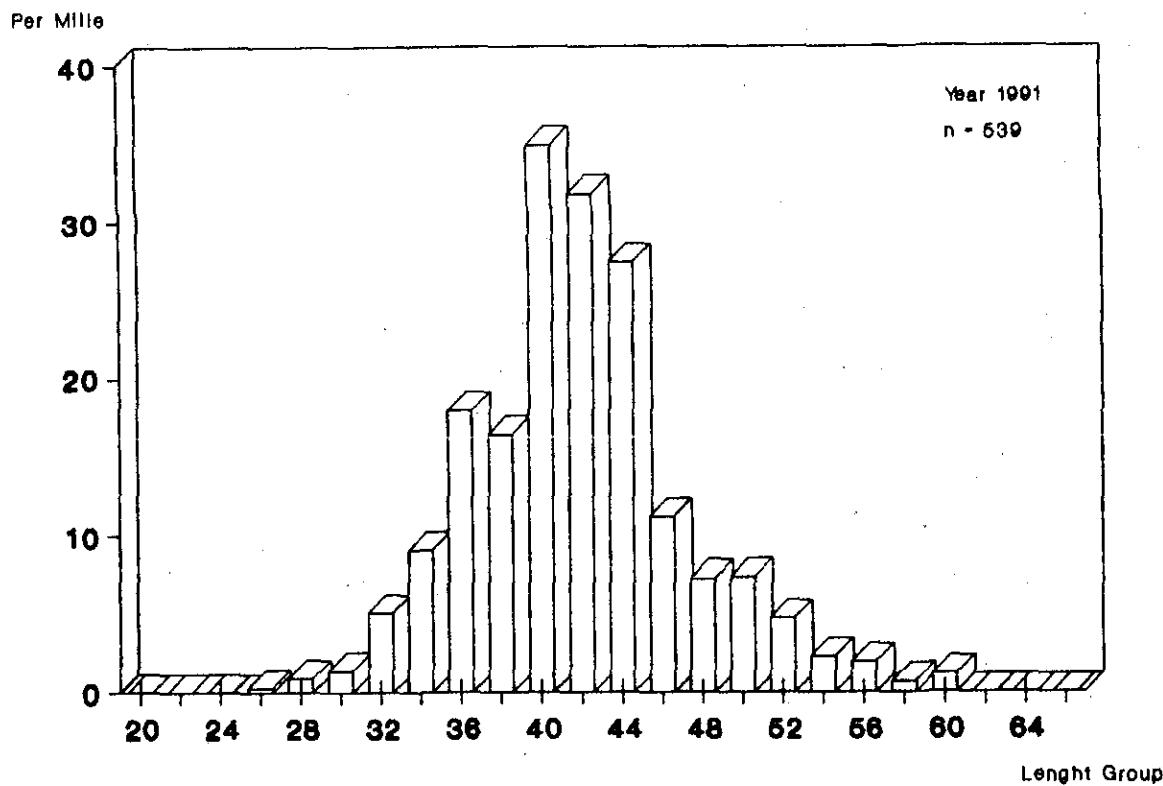


Fig. 17 - Annual length composition of Greenland halibut, (male) in Division 3N, trawl fishery in 1991.

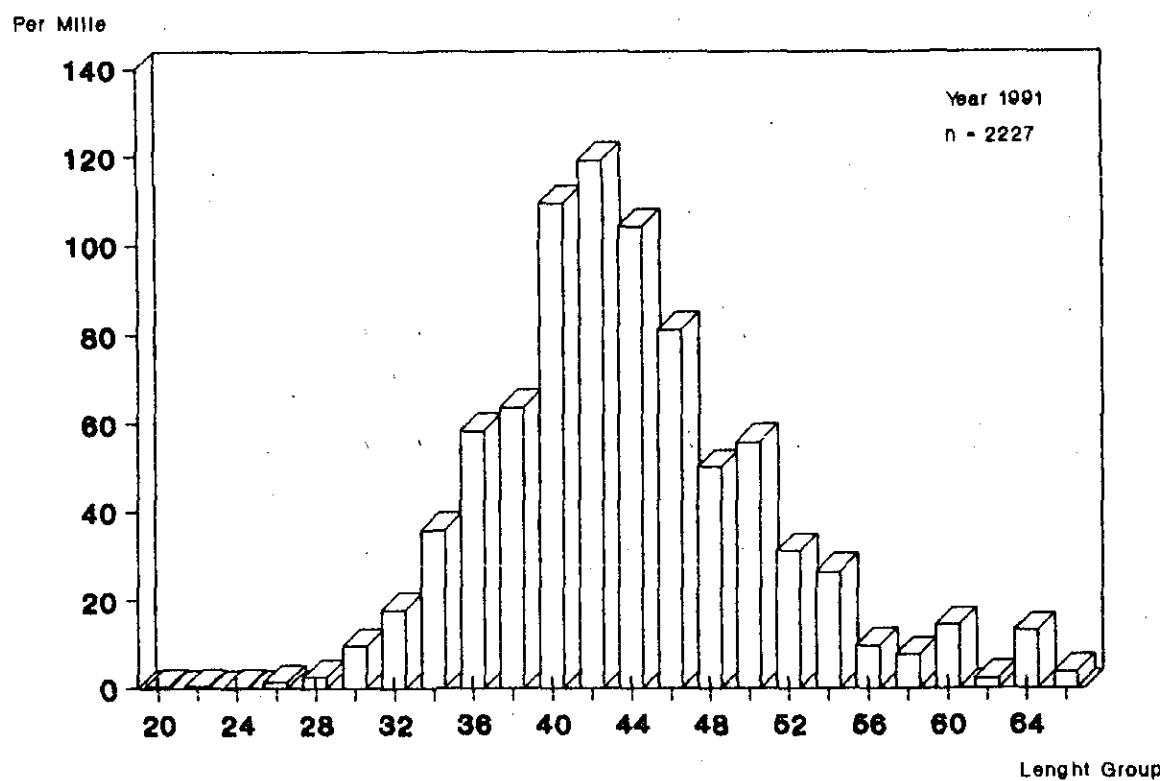


Fig. 18 - Annual length composition of Greenland halibut, (female) in Division 3N, trawl fishery in 1991.

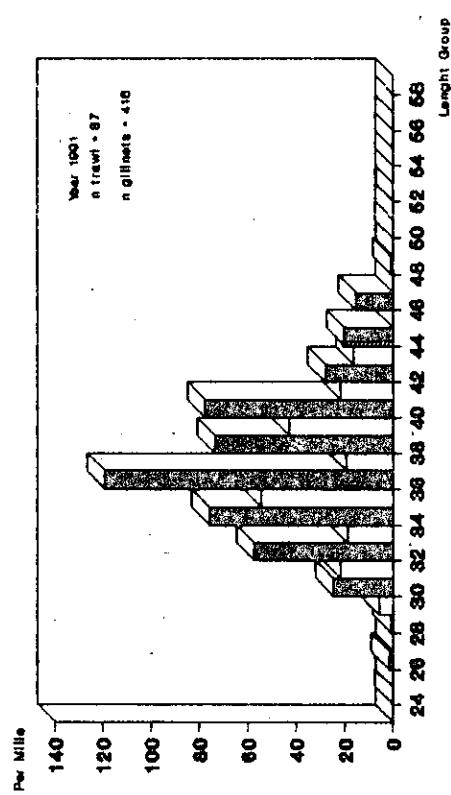


Fig. 19 - Annual length composition of American plaice, (male) in Division 3M, trawl and gillnet fishery in 1991.

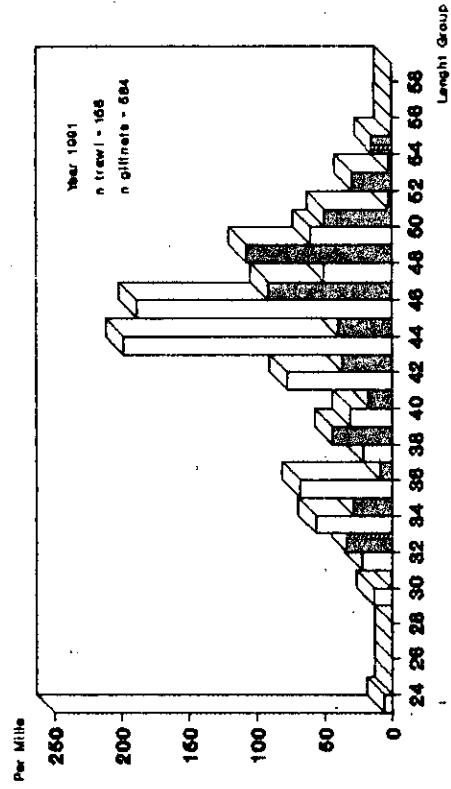


Fig. 20 - Annual length composition of American plaice, (female) in Division 3M, trawl and gillnet fishery in 1991.

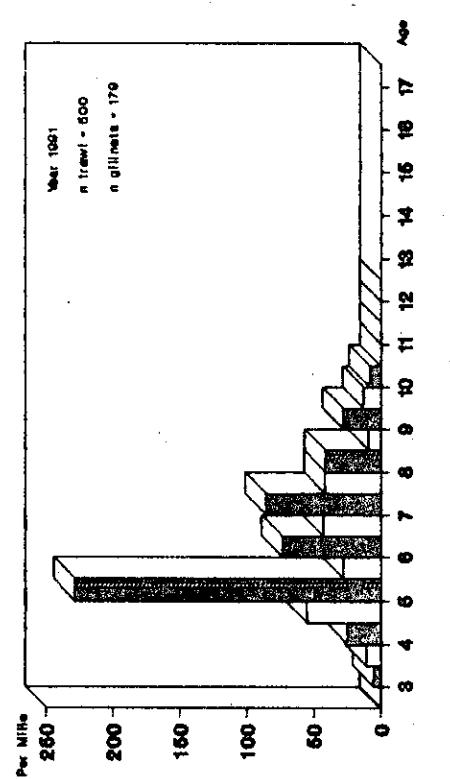


Fig. 21 - Annual age composition of American plaice, (male) in Division 3M, trawl and gillnet fishery in 1991.

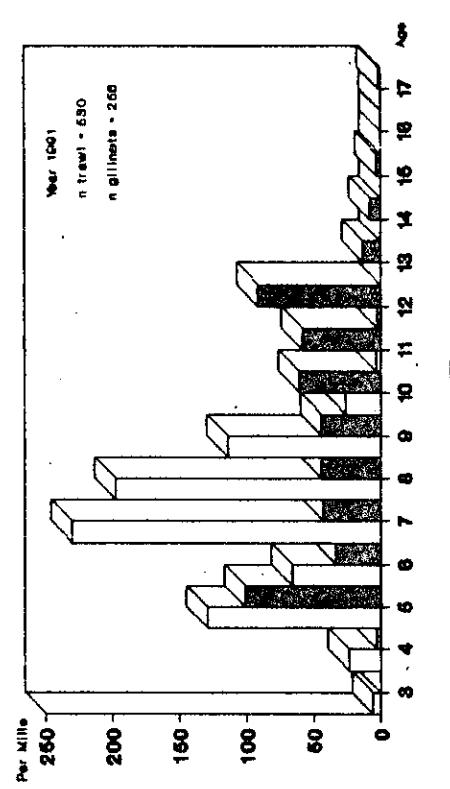


Fig. 22 - Annual age composition of American plaice, (female) in Division 3M, trawl and gillnet fishery in 1991.

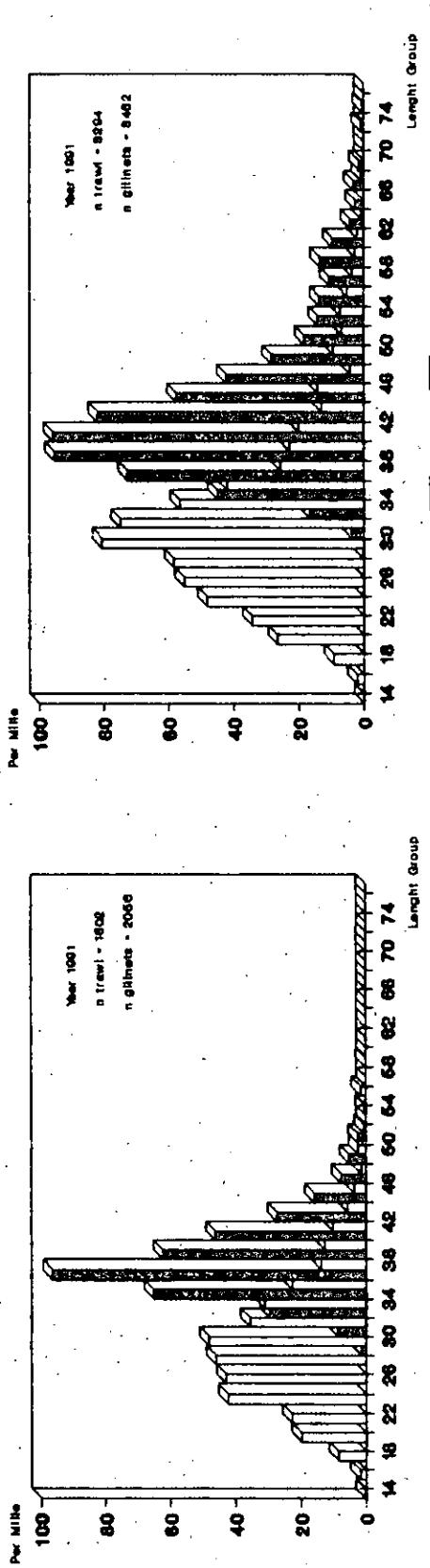


Fig. 23 - Annual length composition of American plaice, (male) in Division 3NO, trawl and gillnet fishery in 1991.

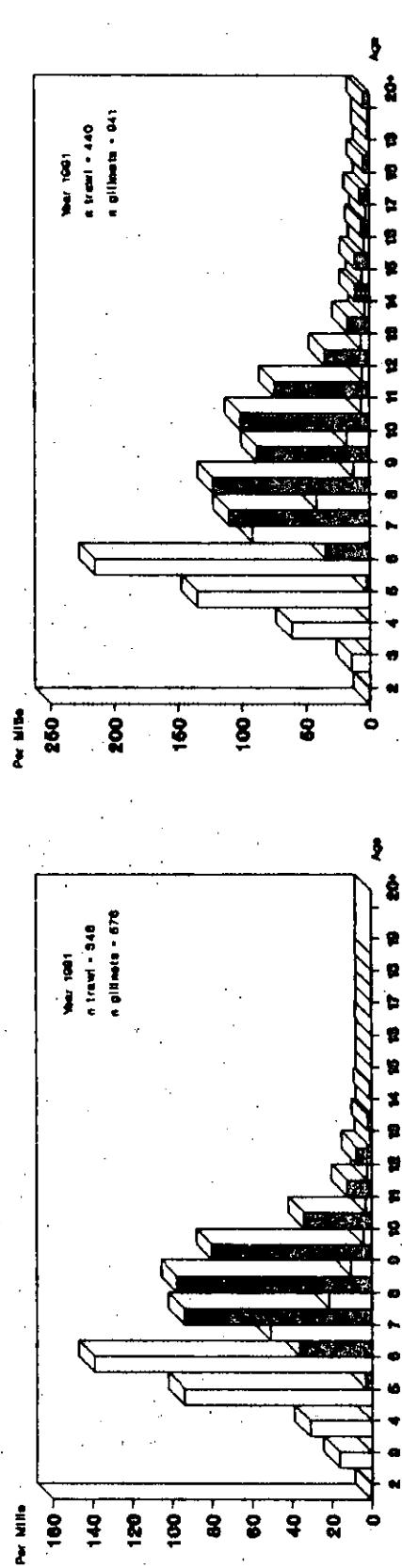


Fig. 25 - Annual age composition of American plaice, (male) in Division 3NO, trawl and gillnets fishery in 1991.



Fig. 26 - Annual age composition of American plaice, (female) in Division 3NO, trawl and gillnets fishery in 1991.

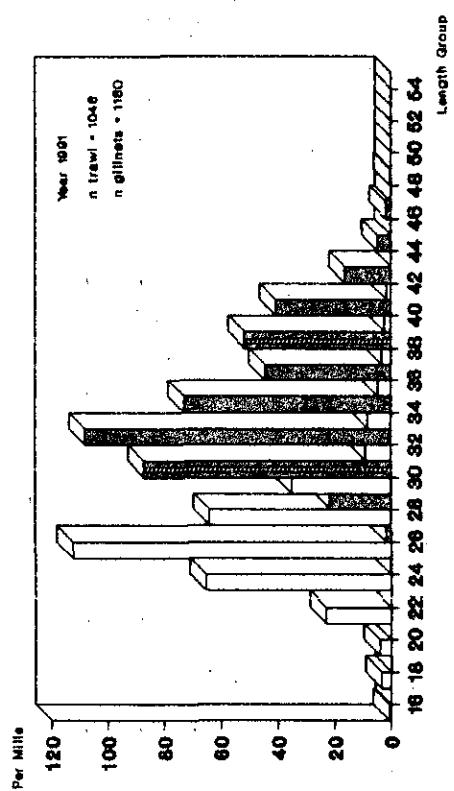


Fig. 27 - Annual length composition of yellowtail flounder (male) in Division 3NO, trawl and gillnet fishery in 1991.

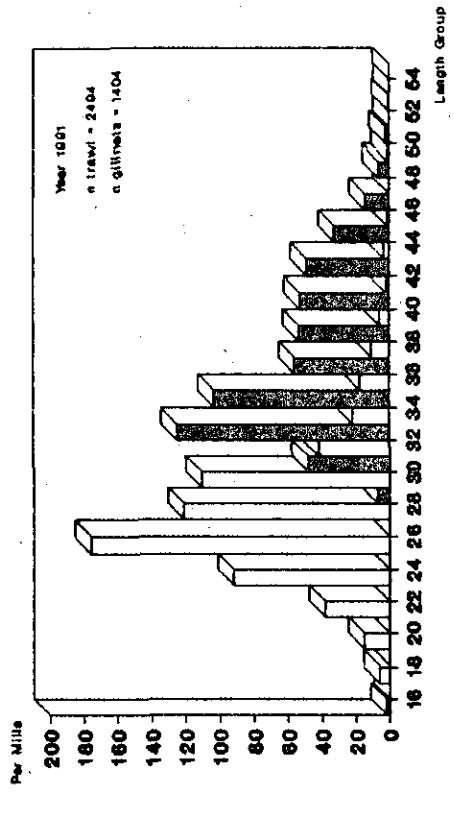


Fig. 28 - Annual length composition of yellowtail flounder (female) in Division 3NO, trawl and gillnet fishery in 1991.

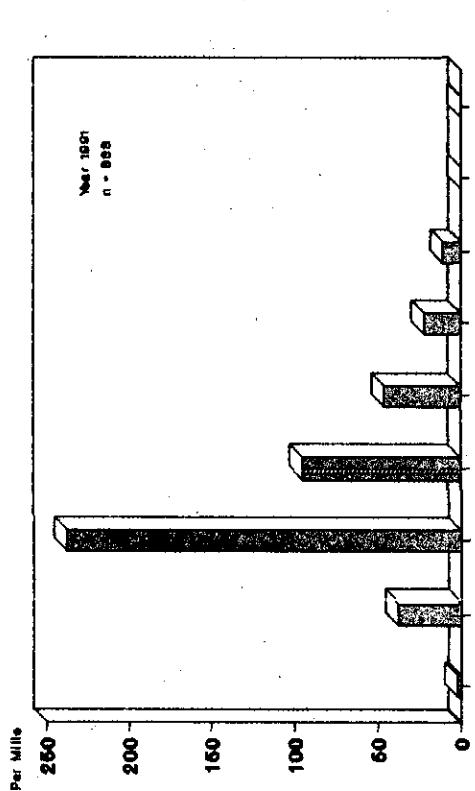


Fig. 29 - Annual age composition of yellowtail flounder (male) in Division 3NO, gillnet fishery in 1991.

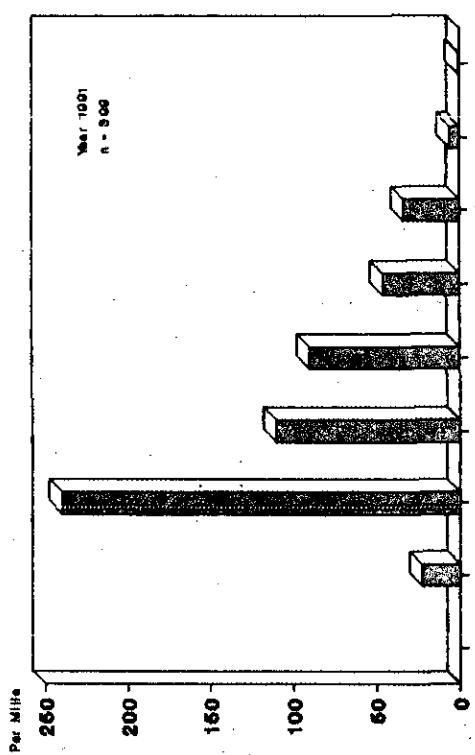


Fig. 30 - Annual age composition of yellowtail flounder (female) in Division 3NO, gillnet fishery in 1991.

APPENDIX

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

$$\log w = -5.2106 + 3.034 \log l \quad (\text{Hodder, 1964})$$

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

$$\begin{aligned} & 2.0548 \\ \text{males } w &= 0.01659^{\frac{1}{l}} \\ & 3.0210 \\ \text{females } w &= 0.01372^{\frac{1}{l}} \quad (\text{Power and Atkinson, 1990}) \end{aligned}$$

AMERICAN PLAICE, divisions 3L and 3M

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

division 3M

$$\begin{aligned} & 3.2406 \\ w &= 0.004328^{\frac{1}{l}} \quad (\text{Vazquez, 1991}) \end{aligned}$$

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

$$\begin{aligned} & 3.3454 \\ w &= 0.002184^{\frac{1}{l}} \quad (\text{Bowering and Stansbury, 1984}) \end{aligned}$$

YELLOWTAIL FLOUNDER, divisions 3N and 3O

$$\log w = -5.434 + 3.443 \log l \quad (\text{Pitt, 1978})$$

WITCH FLOUNDER, division 3O

$$\begin{aligned} & 3.4970 \\ w &= 0.001083^{\frac{1}{l}} \quad (\text{Bowering and Stansbury, 1984}) \end{aligned}$$