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PORTUGUESE RESEARCH REPORT FOR 2001

by

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A. Status of the fisheries

In 2001 the Portuguese nominal catches proceeding from NAFO Regulatory Area recorded 15,002 ton (Tab. I), 14,700 ton from Subarea 3 and 302 ton of redfish captured in Div. 1F and 2J. The NAFO nominal catches decreased continuously from 1991 (75,000 ton) to 1997 (9,000 ton) with two major drops: first from 1991 to 1992 (less 36,220 ton) and second from 1994 to 1995 (less 11,441 ton). The lowest level of the nominal catches for the modern history of the Portuguese Northwest Atlantic fisheries was reached in 1997. In 1999 catches almost doubled the average level of the two precedent years (16,554 ton), oscillating afterwards between 13,000 ton and 15,000 from 2000 to 2001.

This last increase of the catch reflects an increase in fishing effort of the Portuguese fleet in 2001 (Tab. II-A), both in number of days (32.5%) and fishing hours (71%). Only in Div. 3O the number of days decreased (20%) while the number of fishing hours increased (35,5%), due to a higher number of hours per fishing day recorded in that division for the trawler under scientific monitoring.

During 2001 only stern trawlers composed the Portuguese fleet (12 trawlers, one of them 61 days fishing for shrimp in Div. 3M).

From 2000 to 2001 catches recorded an overall increase in Div. 3L (+7.5%), 3N (+15%) and namely 3M (+120%) but decreased in Div. 3O (-20%). The two major species in the Portuguese catches for the more recent years, Greenland halibut and redfish, supported the sharp increase observed in 3M catch, but considering Sub Area 3 as a whole, their level was kept fairly constant from 2000 to 2001. Most of the species with low levels of catch, like witch flounder, yellowtail flounder, American plaice, and cod (including red hake in Div. 3O and 3M shrimp as well), shown an important increase of their respective catches. These species were the ones that justified the 2,000 tons of increase in the Portuguese nominal catches between the last couple of years.

Greenland halibut catches decreased in Div. 3L and 3O (-10% and -74%), but increased sharply in Div. 3M (165%). Since 1994, Greenland halibut has been the most important commercial species in Div. 3L and 3N, followed by roughhead grenadier and skates. Greenland halibut and roughhead grenadier represented 77% of the 3L catches in 2001, near the level observed years before. But in Div. 3N the relative weight of these two species has been declining from 76% in 1998 to 50% in 2000 and 46% in 2001, while the importance of American plaice and yellowtail flounder in the 3N catch increase.

Like in 2000, redfish was the most important catch in Div. 3M (40% of the catch in this division). In Div. 3O redfish has maintained its importance as well, representing 83% of the catches in 2001 against 87% in 2000.

From the monitored fishing vessel Greenland halibut was the priority species for the Portuguese trawl fleet during 2001, accounting for 67% of the total directed effort (Tab. II-C, Fig. 1). In 2001 the majority of the observed fishing effort (67%) has been made north (Div. 3L and 3M-Flemish Cap). This level is higher than the one for 2000 due to the increase of Div. 3M fishing effort directed to Greenland halibut and redfish.

B. Portuguese Annual Sampling Program

1. Catch and effort sampling.

Effort and cpue data for 2001 Portuguese trawl fishery on the NAFO Regulatory Area were obtained through the revision of skipper logbooks from one trawler, kindly supplied by its owner. All the information (round weight of the catch by species, fishing effort, positions and depths) has been recorded on a tow-by-tow basis. The vessel conversion factors were used to convert its processed landings in catches. Effort data obtained through the revision of the 2001 logbooks available were processed in order to convert the 2001 Portuguese effort, reported in fishing days on the 2001 Portuguese STATLANT 21-B, into fishing hours (Tab. II-A).

The daily catch and effort data from the logbooks were used to estimate the directed effort and CPUE for each of the target species/stock, as well as the main by-catch species and depth range of the different fisheries, on a monthly basis. As mentioned before, the majority of the fishing effort was directed towards Greenland halibut (Tab. II-B).

Following the September 1996 recommendation of the NAFO Scientific Council as regards the availability of witch flounder fishery data, a column with the by-catch of this species on the Greenland halibut fishery is included in Tab. III. Data regarding directed effort and catch rates are presented in Table II-C to IV-B, Fig. 1 and 2.

The Greenland halibut cpue series was updated with the 2001 observed cpue's. The additive model (Ávila de Melo and Alpoim, 1995), was upgraded in 1998 (Alpoim et al., 1998), and used like in previous years to standardise the observed cpue's. From January 1988 till April 1995 each monthly observed cpue of this series was previously corrected for 130mm mesh size (Ávila de Melo and Alpoim, 1996). In this analysis, any observation corresponding to a month and a trawler with less than 10 hours of directed effort was rejected. The cpue's are presented in Tables IV and Fig. 2, with the associated standard errors (+/- 2 standard errors in the Figures) and coefficients of variation.

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

1.1.1. Greenland halibut in Div. 3L, 3M and 3N

In Div. 3L catch rates declined prior to the boom of the deep-water fishery (Tab. IV-A, Fig. 2). However, it is from 1990 to 1991, *i.e.* from the first to the second year of this new fishery in the Regulatory Area, that cpue's fell by more than half (0.338 ton/h to 0.139 ton/h). From 1991 to 1994 catch rates remained stable at a low level. Since then catch rates gradually increased, reaching an upper level of 0.290 ton/h in 1999. Cath rate was kept at this level in 2000 but declined in 2001 to the 1996-1997 level.

In Div. 3N no trend is apparent on Greenland halibut trawl cpue's till 1998. An increase was observed in 1999 and 2000, when a maximum of 0.303 ton/h was reached. In 2001 catch rate return to the level of 1999 (Tab. IV-A, Fig. 2).

For all three divisions combined (Tab. IV-A, Fig. 2) the observed catch rates series follows the same pattern as the one for Div. 3L, since this is the division of Sub Area 3 with the highest concentration of Greenland halibut fishing effort.

2. Biological Sampling

In 2001 biological sampling was obtained from one stern trawler fishing in Div. 3L, 3M, 3N and 3O during all the year. Apart from species under moratoria, a priority to be sampled whenever they appear in the hauls, biological sampling was conducted for the two most abundant species in each haul, following the NAFO sampling recommendations.

Greenland halibut, cod, redfish (*S. mentella),* American plaice and witch flounder were sampled in Div. 3L, 3M, 3N and 3O (Tab. V). Redfish (*S. marinus)* was sampled in Div. 3M, 3N and 3O. Roughhead grenadier were sampled in Div. 3L, 3M and 3N. Yellowtail flounder was sampled in Div. 3N and 3O. Red hake were sampled in Div. 3N and 3O. Information on age composition of 3M cod was obtained from the sampled catches. Information on age composition of 3M redfish (*S. mentella*) and 3M American plaice catches was obtained using the respective age/length keys of the July 2001 EU survey (Vazquez, 2002). For the above mentioned species, length and age structure of the catches, respective mean lengths, mean weights in the catch, mean length and mean weight at age by division are presented in Tables VI to XXXV and Fig. 3 to 35.

Since 1996, all commercial information is representative of the catch as a whole, although sampling continues to be carried out by sex with the exception of cod. Mean length and weight at age are the mean of mean lengths and weights at age by sex, weighted by the abundance in the sampled catches of males and females at each age. For all species mean weight at age and mean weight in the catch are derived from the adopted length-weight relationships (see appendix).

Some sets in Div. 3N were made with a trawl net with 300mm mesh size in the codend. In these few sets cod, American plaice and yellowtail were sampled. Length frequency for these catches, respective mean lengths and mean weights in the catch are presented for cod in Table VIII-B and Fig. 6, for American plaice in Table XIX-B and Fig. 18 and for yellowtail flounder in Table XXI-B and Fig. 21.

2.1. Comments on length and age composition of the 2001 trawl catches.

2.1.1. Cod Div. 3L

Biological information of cod catches in Div. 3L is available for April only, from 617m to 826m depth. Sampling size is very small, suggesting that lengths around 42 cm dominated these catches. Mean length and the mean weight in the catch were 44.3cm and 820g (Tab. VI, Fig. 3).

2.1.2. Cod Div. 3M

Biological information of cod catches in Div. 3M is available for July only, from 176m to 210m depth. Sampling size is very small, most frequent sizes at 33cm-39cm and 57cm. The mean length and the mean weight in the catch were 51.1cm and 1596g (Tab. VII-A, Fig. 4A).

Age 3 followed by age 4 were the most frequent in this sample of the trawl catch (Tab. VII-B, Fig. 4B).

2.1.3. Cod Div. 3N

2.1.3.1. Common mesh size (135mm).

Information on length composition of the cod by-catch in Div. 3N is available for May, and August to December (Tab. VIII-A, Fig. 5) from 50m to 759 m depth.

Lengths between 39cm and 48cm dominated the catch, with 45cm as modal length (mean length and weight of 46.8cm and 993g).

2.1.3.2. 300mm mesh size.

Information on length composition of the cod by-catch in Div. 3N is available for July and November (Tab. VIII-B, Fig. 6) from 52m to 92 m depth.

Lengths between 33cm and 105cm composed the 300mm trawl catches, with the most abundant sizes around 42cm (mean length and weight of 56.3cm and 2143g).

2.1.4. Cod Div. 3O

Information on length composition of the cod by-catch in Div. 3O is available for May and July, and September to December (Tab. IX, Fig. 7) from 68m to 547m depth.

Lengths between 39cm and 51cm dominated the catch, with a modal length group at 45cm (mean length and weight of 47.8cm and 1034g).

2.1.5. Redfish (*S. mentella)* **Div. 3L**

Information on length composition of the redfish (*S. mentella)* trawl by-catch in Div. 3L is available from February to August (except June) from depths 493m to 1181m (Tab. X, Fig. 8).

Lengths between 26cm and 31cm dominated catches (mean length and weight of 39.6cm and 384g).

2.1.6. Redfish (*S. mentella*) **Div. 3M**

Information on length and age composition of the redfish (*S. mentella)* trawl catch in Div. 3M is available from February to May, and July to September, from 270m to 1106m depth (Tab. XI-A, Fig. 9A).

Lengths between 25cm and 30cm dominated catches, with 28cm as modal length (mean length and weight of 28.9cm and 357g).

The 1990 year-class, 11 years old in 2001, was the most abundant in the trawl catch, followed by the ones from 1992-1994 (Tab. XI-B, Fig. 9B).

2.1.7. Redfish (*S. mentella*) **Div. 3N**

Information on length composition of the redfish (*S. mentella)* trawl by-catch in Div. 3N is available for May, and July to November, from depths 126 to 1035m (Tab. XII, Fig. 10).

Lengths between 27cm and 31cm dominated catches (mean length and weight of 39.6cm and 393g).

2.1.8. Redfish (*S. mentella*) **Div. 3O**

Information on length composition of the redfish (*S. mentella)* trawl catch in Div. 3O is available for May, and July to December, from depths 68m to 547m (Tab. XIII, Fig. 11).

Lengths between 21cm and 25cm dominated catches (mean length and weight of 24.4cm and 222g).

2.1.9. Redfish (*S. marinus*) **Div. 3M**

Information on length composition of the redfish (*S. marinus)* trawl catch in Div. 3M is available for August and September, from depths 293m to 401m (Tab. XIV, Fig. 12).

Lengths between 25cm and 31cm dominated catches (mean length and weight of 28.5cm and 349g).

2.1.10. Redfish (*S. marinus*) **Div. 3N**

Information on length composition of the redfish (*S. marinus)* trawl by-catch in Div. 3N is available for May and July, from depths 57m to 453m (Tab. XV, Fig. 13).

Lengths between 29cm and 31cm dominated catches, with a modal class at 30 cm (mean length and weight of 28.8cm and 362g).

2.1.11. Redfish (*S. marinus*) **Div. 3O**

Information on length composition of the redfish (*S. marinus)* trawl by-catch in Div. 3O is available for June to December, from depths 68m to 511m (Tab. XVI, Fig. 14).

Sizes between 22cm and 24cm were the most abundant (mean length and weight of 26.4cm and 286g).

2.1.12. American plaice Div. 3L

Information on length composition of the American plaice by-catch in Div. 3L is available from February to May from depths 715m to 1204m (Tab. XVII, Fig. 15).

Lengths between 34cm and 42cm dominated catches (mean length and weight of 39.4cm and 628g).

2.1.13. American plaice Div. 3M

Information on length and age composition of the American plaice by-catch in Div. 3M is available from February to September (except June), from depths 162m to 1111m (Tab. XVIII-A, Fig. 16A).

Lengths between 34cm and 40cm dominated catches (mean length and weight of 40.3cm and 665g).

Age 10 (1991 year-class) was the most abundant in the catch (Tab. XVIII-B, Fig. 16B).

2.1.14. American plaice Div. 3N

2.1.14.1. Common mesh size (135mm).

Information on length composition of the American plaice by-catch in Div. 3N is available for March, May and July to December (except October), from depths 45m to 1238m (Tab. XIX-A, Fig. 17).

Lengths normally distributed between 20cm and 62cm, with a modal class at 36cm (mean length and weight of 38.7cm and 647g).

2.1.14.2. 300mm mesh size.

Information on length composition of the American plaice by-catch in Div. 3N is available for July and November, from depths 52m to 92m (Tab. XIX-B, Fig. 18).

Lengths between 32cm and 52cm dominated catches with 34cm and 48 cm as the most abundant length groups (mean length and weight of 42.9cm and 850g).

2.1.15. American plaice Div. 3O

Information on length composition of the American plaice by-catch in Div. 3O is available for May and July, and September to December from depths 73m to 547m (Tab. XX, Fig. 19).

Lengths between 30cm and 38cm dominated catches, with a modal class at 34cm (mean length and weight of 37.4cm and 564g).

2.1.16. Yellowtail flounder Div. 3N

2.1.16.1. Common mesh size (135mm).

Information on length composition of the yellowtail flounder in Div. 3N is available for May, July and September to December (except October) from depths 45m to 405m (Tab. XXI-A, Fig. 20).

Most abundant length groups between 28cm and 36cm (mean length and weight of 34.9cm and 881g).

2.1.16.2. 300mm mesh size.

Information on length composition of the yellowtail flounder in Div. 3N is available for July and November from depths 52m to 92m (Tab. XXI-B, Fig. 21).

Lengths between 28cm and 32cm were the most abundant in the 300mm trawl catch (mean length and weight of 34.6cm and 854g).

2.1.17. Yellowtail flounder Div. 3O

Information on length composition of the yellowtail flounder in Div. 3O is available for May, and September to December (except October) from depths 79m to 547m (Tab. XXII, Fig. 22).

Lengths between 28cm and 38cm dominated catches, with a modal class at 32 cm (mean length and weight of 34.8cm and 834g).

2.1.18. Greenland halibut Div. 3L

Information on length composition of the Greenland halibut in Div. 3L is available from February to September (except June) from depths 493m to 1234m (Tab. XXIII, Fig. 23).

Lengths between 40cm and 46cm dominated catches, with a mode at 42cm (mean length and weight of 44.9cm and 791g).

2.1.19. Greenland halibut Div. 3M

Information on length composition of the Greenland halibut in Div. 3M is available from February to September (except June) from depths 270m to 1420m (Tab. XXIV, Fig. 24).

Lengths between 40cm and 46cm dominated catches, with a mode at 42cm (mean length and weight of 45.0cm and 789g).

2.1.20. Greenland halibut Div. 3N

Information on length composition of the Greenland halibut in Div. 3N is available for March, May and July to December (except October) from depths 444m to 1300m (Tab. XXV, Fig. 25).

Lengths between 38cm and 50cm dominated catches (mean length and weight of 46.2cm and 884g).

2.1.21. Greenland halibut Div. 3O

Information on length composition of the Greenland halibut in Div. 3O is available for October and November from depths 355m to 486m (Tab. XXVI, Fig. 26).

Lengths between 40cm and 46cm dominated catches, with a clear mode at 42 cm (mean length and weight of 43.0cm and 658g).

2.1.22. Roughhead grenadier Div. 3L

Information on length composition of the roughhead grenadier catches in Div. 3L is available from February to September (except June), from depths 493m to 1234m (Tab. XXVII, Fig. 27).

Anal lengths between 10cm and 14cm dominated catches (mean length and weight of 12.9cm and 245g).

2.1.23. Roughhead grenadier Div. 3M

Information on length composition of the roughhead grenadier catches in Div. 3M is available from February to September (except June) from depths 594m to 1420m (Tab. XXVIII, Fig. 28).

Anal lengths between 10cm and 13cm dominated catches, with 10cm and 12 cm as the most abundant length groups (mean length and weight of 12.7cm and 234g).

2.1.24. Roughhead grenadier Div. 3N

Information on length composition of the roughhead grenadier catches in Div. 3N is available for March, May, July , August, November and December from depths 626m to 1300m (Tab. XXIX, Fig. 29).

Anal lengths between 10cm and 13cm dominated catches (mean length and weight of 13.2cm and 279g).

2.1.25. Witch flounder Div. 3L

Information on length composition of the witch flounder catches in Div. 3L is available from February to May and August, from depths 608m to 1188m (Tab. XXX, Fig. 30).

Lengths between 34cm and 42cm dominated catches (mean length and weight of 40.3cm and 483g).

2.1.26. Witch flounder Div. 3M

Information on length composition of the witch flounder catches in Div. 3M is available from February to July (except June) from depths 162m to 1101m (Tab. XXXI, Fig. 31).

Lengths between 36cm and 44cm dominated catches, with a mode at 40cm (mean length and weight of 40.9cm and 494g).

2.1.27. Witch flounder Div. 3N

Information on length composition of the witch flounder catches in Div. 3N is available for March, May and from July to November (except October) from depths 580m to 1300m (Tab. XXXII, Fig. 32).

Lengths between 34cm and 42cm dominated catches, with a mode at 38cm (mean length and weight of 40.4cm and 490g).

2.1.28. Witch flounder Div. 3O

Information on length composition of the witch flounder catches in Div. 3O is available from July to December (except August) from depths 79m to 447m (Tab. XXXIII, Fig. 33).

Lengths between 32cm and 38cm dominated catches (mean length and weight of 37.5cm and 384g).

2.1.29. Red hake Div. 3N

Information on length composition of the red hake catches in Div. 3N is available only from one sample in October from depths 343m to 364m (Tab. XXXIV, Fig. 34).

Most of sampled catch laid within 40cm to 57cm interval with no clear mode (mean length of 48.2cm).

2.1.30. Red hake Div. 30

Information on length composition of the red hake catches in Div. 3O is available from October to December from depths 68m to 511m (Tab. XXXV, Fig. 35).

Lengths evenly distributed between 30cm and 56cm, with the most abundant length groups between 40cm and 45cm (mean length of 43.0cm).

3. Acknowledgements

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4. References

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TABLE I - A: PORTUGUESE NOMINAL TRAWL CATCHES (mt) IN NAFO AREA, 2001.

	DIVISION						SUBAREA 3	TOTAL
SPECIES	1F	2J	3L	3M	3N	3O	2001	2001
Cod			54.7	54.1	121.1	126.8	356.7	356.7
Redfish	73.2	228.5	123.9	1589.3	75.6	3534.8	5323.6	5625.3
American plaice			167.1	162.1	220.3	83.7	633.2	633.2
Yellowtail			9.9		311.5	29.4	350.8	350.8
Witch flounder			98.7	324.9	89.8	65.4	578.8	578.8
Greenland halibut			2797.7	1223.4	932.5	72.1	5025.7	5025.7
Atlantic halibut			6.2	0.9	24	13.2	44.3	44.3
Roughhead grenadier			314.5	126.6	161.7	7.6	610.4	610.4
Anarhichas spp.			62	14.2	57.9	6.9	141	141
Hadocck					0.4	22.1	22.5	22.5
Pollock								
Red hake			19.8	3.7	19.3	230.4	273.2	273.2
Capelin								
Skates			367.5	87.7	366.4	58.5	880.1	880.1
Monkfish								
Squid								
Shrimp				419.7			419.7	419.7
Unidentified			9.9	5.1	12.9	12.6	40.5	40.5
TOTAL	73.2	228.5	4031.9	4011.7	2393.4	4263.5	14700.5	15002.2

TABLE I - B: PORTUGUESE NOMINAL TRAWL CATCHES (mt) IN NAFO SUBAREA 3.

SPECIES / YEAR	2001	2000	1999	1998	1997	1996	1995
Cod	357	193	327	549	1546	1318	1353
Redfish	5324	5743	6081	2368	1125	2152	2590
American plaice	633	402	719	357	389	298	175
Yellowtail flounder	351	153	426	85			
Witch flounder	579	228	508	381	347	236	375
Greenland halibut	5026	4769	3995	3242	3343	3308	1814
Atlantic halibut	44	29	51	30	17	12	18
Roughhead grenadier(1)	610	396	1299	1089	762	784	1402
Anarhichas spp.	141	61	549	140	185	122	1401
Hadocck	23	13	10	6	39		2
Pollock							
Red hake	273	41	77	18	56	124	230
Capelin							
Skates	880	666	2168	1105	904	788	2068
Monkfish							2
Squid				1		3	
Shrimp	420	289	227	203	170		
Unidentified	41	3	117	40	116	22	14
TOTAL	14701	12985	16554	9614	9000	9167	11441

TABLE I - B: cont.

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

(1) Reported as Roundnose grenadier in years before.

TABLE II - A : PORTUGUESE TRAWL EFFORT IN FISHING DAYS AND FISHING HOURS IN NAFO AREA IN 2001.

MONTH	DIVISION 1F	2J	3L		3M		3N		3O		SUBAREA 3		TOTAL	MONTH
	DAYS	DAYS	DAYS	HOURS	DAYS	HOURS	DAYS	HOURS	DAYS	HOURS	DAYS	HOURS	DAYS	
JAN.			118	1684	25	340	14	193	7	69	164	2286	164	JAN.
FEB.			186	2654	62	844	5	69		0	253	3567	253	FEB.
MAR.			134	1881	144	1837	42	579	1	10	321	4307	321	MAR.
APR.			92	1445	57	858	3	40	7	69	159	2413	159	APR.
MAY			54	569	43	594	25	329	7	69	129	1561	129	MAY
JUN.			3	43	26	370	9	111	9	138	47	662	47	JUN.
JUL.			27	439	14	207	15	170	6	97	62	913	62	JUL.
AUG.	11	6	35	649	62	920	42	357	36	378	175	2304	192	AUG.
SEP.		2	41	787	10	140	34	124	19	210	104	1261	106	SEP.
OCT.			16	307	8	112	47	317	39	663	110	1399	110	OCT.
NOV.			34	653	7	98	85	832	77	1058	203	2642	203	NOV.
DEC.			30	576	19	266	40	172	54	648	143	1663	143	DEC.
TOTAL	11	8	770	11688	477	6586	361	3294	262	3411	1870	24979	1889	TOTAL

Note: Fishing hours and number of nets estimated from their monthly rates to fishing days observed in the trawlers and gillnetters sampled by the IPIMAR.
Monthly effort of gillnetters is given by the sum of nets per fishing day

TABLE II - B: PORTUGUESE TRAWL EFFORT IN FISHING DAYS AND FISHING HOURS IN NAFO SUBAREA 3.

YEAR	GEAR OT		GNS		YEAR
	DAYS	HOURS	DAYS	NETS	
2001	1870	24979			2001
2000	1411	14588			2000
1999	1631	19234			1999
1998	1172	16517			1998
1997	1428				1997
1996	1912	27206	166		1996
1995	1425	19083	612	173833	1995
1994	1553	22065	676	166735	1994
1993	2496	32481	731	209536	1993
1992	2670	32662	672	266141	1992
1991	5297	74829	712	302407	1991
1990	5026	72536	714	238732	1990
1989	3850	54833	692	268885	1989

Table II - C : Breakdown of the 2001 sampled Portuguese directed trawl effort by species and division (%).

DIVISION	G.HALIBUT	SKATES	ROUGHHEAD G.	REDFISH	TOTAL/DIV.
3L	34.9	0.4	0.8		36.0
3M	22.9	0.8	0.8	7.0	31.4
3N	9.3	2.7	0.8		12.8
3O		1.6		18.2	19.8
TOTAL/SPECIES	67.1	5.4	2.3	25.2	

TABLE III: Portuguese trawl fishery cpue's and bycatch by month and division for 2001

DIVISION	TARGET SPECIES	MONTH	DEPTH RANGE (m) MIN.	DEPTH RANGE (m) MAX.	CPUE (ton/hour)	MAIN BYCATCH SPECIES	MAIN BYCATCH %	WITCH FLOUNDER BYCATCH (%)	TOTAL BYCATCH (%)
3M	REDFISH	FEB	746	926	0.206	G. HALIBUT	38.9	0.8	49.9
3M	REDFISH	MAR	803	814	0.218	G. HALIBUT	47.8	0.0	48.9
3M	REDFISH	APR	862	990	0.156	G. HALIBUT	42.7	4.8	62.2
3M	REDFISH	MAY	890	1010	0.141	G. HALIBUT	45.1	5.4	66.0
3M	REDFISH	JUL	176	415	0.137	ANARHICHAS SPP	13.6	1.8	32.3
3M	REDFISH	AUG	293	1111	0.380	G. HALIBUT	8.1	0.0	17.6
3M	REDFISH	SEP	311	462	0.650	G. HALIBUT	2.3	0.0	6.5
3O	REDFISH	MAY	290	492	2.104	YELLOWTAIL F.	4.6	0.5	12.7
3O	REDFISH	JUL	95	553	0.898	RED HAKE	3.5	0.2	7.8
3O	REDFISH	AUG	348	478	0.910	RED HAKE	3.4	0.0	7.2
3O	REDFISH	SEP	139	547	1.093	RED HAKE	5.6	0.1	11.8
3O	REDFISH	OCT	95	468	0.729	A. PLAICE	2.2	0.6	7.4
3O	REDFISH	NOV	68	531	0.701	RED HAKE	9.4	1.0	24.4
3O	REDFISH	DEC	164	499	0.474	RED HAKE	23.0	3.7	54.6
3L	G. HALIBUT	FEB	815	1234	0.193	ROUGHHEAD G.	7.3	3.3	19.9
3L	G. HALIBUT	MAR	820	1218	0.244	ROUGHHEAD G.	5.5	1.5	13.9
3L	G. HALIBUT	APR	728	1197	0.327	REDFISH	7.5	0.9	21.1
3L	G. HALIBUT	MAY	715	1188	0.272	ROUGHHEAD G.	8.1	1.7	20.4
3L	G. HALIBUT	JUL	619	1227	0.174	ROUGHHEAD G.	8.4	0.0	13.7
3L	G. HALIBUT	AUG	493	1164	0.156	ROUGHHEAD G.	16.0	0.2	21.3
3L	G. HALIBUT	SEP	824	1222	0.140	ROUGHHEAD G.	14.7	0.0	19.4
3M	G. HALIBUT	FEB	746	1175	0.244	REDFISH	15.2	2.0	29.2
3M	G. HALIBUT	MAR	594	1420	0.254	WITCH FLOUNDER	14.7	14.7	33.6
3M	G. HALIBUT	APR	851	1183	0.310	REDFISH	11.6	3.9	30.8
3M	G. HALIBUT	MAY	828	1100	0.224	REDFISH	16.7	4.9	37.8
3M	G. HALIBUT	JUL	689	1121	0.190	ROUGHHEAD G.	8.9	0.0	11.8
3M	G. HALIBUT	AUG	250	1133	0.142	REDFISH	10.3	0.0	33.7
3M	G. HALIBUT	SEP	364	1088	0.093	ROUGHHEAD G.	20.4	0.0	39.5
3N	G. HALIBUT	MAR	1007	1283	0.216	ROUGHHEAD G.	17.4	1.5	27.5
3N	G. HALIBUT	MAY	403	1252	0.270	SKATES	19.8	2.8	44.7
3N	G. HALIBUT	JUL	626	1153	0.210	ROUGHHEAD G.	13.8	7.1	36.1
3N	G. HALIBUT	AUG	889	1083	0.169	ROUGHHEAD G.	14.2	3.6	25.4
3N	G. HALIBUT	NOV	800	1300	0.151	ROUGHHEAD G.	16.9	4.4	26.9
3N	G. HALIBUT	DEC	1064	1102	0.368	SKATES	13.2	0.0	22.9
3L	ROUGHHEAD G.	FEB	999	1076	0.046	G. HALIBUT	40.4	23.6	78.2
3L	ROUGHHEAD G.	AUG	954	986	0.092	G. HALIBUT	53.5	0.0	59.6
3M	ROUGHHEAD G.	MAR	1007	1039	0.087	G. HALIBUT	30.6	29.1	79.3
3M	ROUGHHEAD G.	SEP	1074	1088	0.046	G. HALIBUT	31.8	0.0	58.3
3N	ROUGHHEAD G.	MAY	1046	1114	0.381	SKATES	36.6	1.0	72.3
3N	ROUGHHEAD G.	AUG	185	383	0.059	REDFISH	37.1	0.0	76.4
3L	SKATES	APR	728	775	0.101	G. HALIBUT	38.1	0.0	80.1
3M	SKATES	JUL	162	210	0.020	A. PLAICE	25.7	23.9	74.1
3N	SKATES	MAY	1030	1114	0.252	G. HALIBUT	38.1	1.7	62.7
3N	SKATES	JUL	50	56	0.141	A. PLAICE	40.0	0.0	74.6
3N	SKATES	NOV	52	110	0.220	A. PLAICE	40.4	0.0	63.3
3O	SKATES	JUL	111	211	0.153	RED HAKE	29.5	2.8	79.7
3O	SKATES	NOV	71	365	0.212	RED HAKE	25.3	3.7	73.4
3O	SKATES	DEC	166	187	0.438	REDFISH	28.5	4.6	91.1

TABLE IV - A: GREENLAND HALIBUT TRAWL CATCH RATES, 1988-2001: mean annual cpue's corrected for the month, division and vessel of each observation.

	3L			3M			3N			3LMN			
	CPUE	ST.ERROR	C.V.	CPUE	ST.ERROR	C.V.	CPUE	ST.ERROR	C.V.	CPUE	ST.ERROR	C.V.	
1988	0.433	0.101	40.2							0.467	0.106	39.5	1988
1989	0.386	0.050	39.2							0.376	0.058	46.3	1989
1990	0.338	0.033	34.2	0.224			0.183			0.330	0.033	37.9	1990
1991	0.139	0.035	57.2				0.172	0.033	33.1	0.148	0.021	40.3	1991
1992	0.114	0.032	90.0				0.218	0.025	39.5	0.176	0.025	65.8	1992
1993	0.113	0.004	5.2				0.175	0.018	34.7	0.153	0.018	43.5	1993
1994	0.097	0.026	38.5				0.150	0.020	31.9	0.134	0.017	36.8	1994
1995	0.158	0.026	46.5	0.181	0.020	24.9	0.155	0.022	38.1	0.164	0.016	43.6	1995
1996	0.215	0.021	35.1	0.219	0.026	36.0	0.187	0.018	25.3	0.199	0.009	24.6	1996
1997	0.225	0.017	25.1	0.261	0.020	21.4	0.180	0.009	7.2	0.219	0.016	32.5	1997
1998	0.260	0.017	24.9	0.182	0.030	56.8	0.184	0.013	22.7	0.219	0.011	30.0	1998
1999	0.290	0.022	24.0	0.281	0.020	21.1	0.232	0.020	24.0	0.278	0.017	31.3	1999
2000	0.293	0.021	18.5	0.269	0.026	21.2	0.303	0.046	30.4	0.293	0.018	25.1	2000
2001	0.232	0.028	32.2	0.205	0.010	12.3	0.227	0.017	17.2	0.219	0.013	25.4	2001

TABLE IV - B: GREENLAND HALIBUT TRAWL CATCH RATES, 1988-2001: mean cpue's by division corrected for the year, month and vessel of each observation.

	CPUE	ST.ERROR	C.V.	
3L	0.246	0.009	37.4	3L
3M	0.226	0.011	37.7	3M
3N	0.196	0.007	32.8	3N
3LMN	0.226	0.005	37.9	3LMN

TABLE V: Intensity of the trawl sampling during 2001, by species, division and month.

SPECIES	DIV.	MONTH	Nº OF SAMPLES	Nº FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS Nº	OTOLITHS LENGTH RANGE (cm)
COD	3L	APR	3	468	506	111	31 - 80
COD	3M	JUL	1	23	48	23	30 - 82
COD	3N	MAY	1	76	89	-	-
COD	3N	JUL	4	399	890	149	26 - 101
COD	3N	AUG	1	101	119	77	26 - 66
COD	3N	SEP	7	993	1003	-	-
COD	3N	OCT	1	25	32	-	-
COD	3N	NOV	9	418	1318	58	37 - 103
COD	3N	DEC	3	563	761	-	-
COD	3O	MAY	1	91	193	-	-
COD	3O	JUL	5	197	312	88	32 - 65
COD	3O	SEP	6	399	383	-	-
COD	3O	OCT	2	157	226	40	36 - 74
COD	3O	NOV	20	1812	2448	65	38 - 92
COD	3O	DEC	9	1182	1363	-	-
REDFISH (*S. mentella*)	3L	FEB	2	412	164	67	24 - 37
REDFISH (*S. mentella*)	3L	MAR	5	922	366	68	24 - 37
REDFISH (*S. mentella*)	3L	APR	13	3695	1434	100	22 - 41
REDFISH (*S. mentella*)	3L	MAY	3	623	227	-	-
REDFISH (*S. mentella*)	3L	JUL	4	172	90	113	17 - 45
REDFISH (*S. mentella*)	3L	AUG	3	343	135	27	26 - 38
REDFISH (*S. mentella*)	3M	FEB	5	1414	563	142	23 - 44
REDFISH (*S. mentella*)	3M	MAR	7	1389	577	135	24 - 40
REDFISH (*S. mentella*)	3M	APR	15	4537	1717	117	23 - 40
REDFISH (*S. mentella*)	3M	MAY	10	3533	1382	-	-
REDFISH (*S. mentella*)	3M	JUL	2	522	208	128	20 - 48
REDFISH (*S. mentella*)	3M	AUG	8	2173	850	192	17 - 50
REDFISH (*S. mentella*)	3M	SEP	2	620	227	100	16 - 37
REDFISH (*S. mentella*)	3N	MAY	1	361	127	-	-
REDFISH (*S. mentella*)	3N	JUL	3	728	351	100	26 - 45
REDFISH (*S. mentella*)	3N	AUG	1	184	86	52	18 - 39
REDFISH (*S. mentella*)	3N	SEP	4	1777	654	-	-
REDFISH (*S. mentella*)	3N	OCT	1	284	99	-	-
REDFISH (*S. mentella*)	3N	NOV	2	822	327	-	-
REDFISH (*S. mentella*)	3O	MAY	1	398	72	-	-
REDFISH (*S. mentella*)	3O	JUL	6	2178	671	228	18 - 46
REDFISH (*S. mentella*)	3O	AUG	1	364	54	-	-
REDFISH (*S. mentella*)	3O	SEP	7	3203	612	68	19 - 36
REDFISH (*S. mentella*)	3O	OCT	3	1450	331	103	17 - 33
REDFISH (*S. mentella*)	3O	NOV	20	7921	1886	67	19 - 32
REDFISH (*S. mentella*)	3O	DEC	9	3378	837	-	-
REDFISH (*S. marinus*)	3M	AUG	5	769	285	122	18 - 42
REDFISH (*S. marinus*)	3M	SEP	1	130	41	-	-
REDFISH (*S. marinus*)	3N	MAY	1	446	123	-	-
REDFISH (*S. marinus*)	3N	JUL	2	458	177	105	20 - 39
REDFISH (*S. marinus*)	3O	JUL	6	968	368	173	20 - 44
REDFISH (*S. marinus*)	3O	AUG	1	142	27	-	-
REDFISH (*S. marinus*)	3O	SEP	5	1362	284	-	-
REDFISH (*S. marinus*)	3O	OCT	3	875	272	50	25 - 34
REDFISH (*S. marinus*)	3O	NOV	16	4090	1238	-	-
REDFISH (*S. marinus*)	3O	DEC	5	1276	370	-	-

TABLE V: count.

SPECIES	DIV.	MONTH	Nº OF SAMPLES	Nº FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS Nº	OTOLITHS LENGTH RANGE (cm)
AMERICAN PLAICE	3L	FEB	3	456	335	102	32 - 56
AMERICAN PLAICE	3L	MAR	15	1779	1198	163	23 - 54
AMERICAN PLAICE	3L	APR	14	2641	1521	60	29 - 57
AMERICAN PLAICE	3L	MAY	6	683	443	-	-
AMERICAN PLAICE	3M	FEB	4	256	170	34	32 - 53
AMERICAN PLAICE	3M	MAR	10	1166	885	94	30 - 54
AMERICAN PLAICE	3M	APR	15	2170	1408	92	35 - 55
AMERICAN PLAICE	3M	MAY	10	2003	1376	-	-
AMERICAN PLAICE	3M	JUL	2	206	150	52	31 - 65
AMERICAN PLAICE	3M	AUG	8	1089	700	-	-
AMERICAN PLAICE	3M	SEP	2	295	202	-	-
AMERICAN PLAICE	3N	MAR	2	190	115	53	29 - 58
AMERICAN PLAICE	3N	MAY	6	1357	996	-	-
AMERICAN PLAICE	3N	JUL	4	918	668	130	19 - 59
AMERICAN PLAICE	3N	AUG	1	186	122	50	22 - 59
AMERICAN PLAICE	3N	SEP	9	2607	1662	207	16 - 58
AMERICAN PLAICE	3N	NOV	10	2492	2423	232	17 - 70
AMERICAN PLAICE	3N	DEC	3	1000	647	-	-
AMERICAN PLAICE	3O	MAY	1	320	176	-	-
AMERICAN PLAICE	3O	JUL	1	234	143	-	-
AMERICAN PLAICE	3O	SEP	5	918	651	-	-
AMERICAN PLAICE	3O	OCT	1	250	199	-	-
AMERICAN PLAICE	3O	NOV	10	2188	1256	-	-
AMERICAN PLAICE	3O	DEC	9	2034	1139	-	-
YELLOWTAIL FLOUNDER	3N	MAY	2	941	313	-	-
YELLOWTAIL FLOUNDER	3N	JUL	4	785	314	60	26 - 56
YELLOWTAIL FLOUNDER	3N	SEP	8	2278	1205	153	20 - 49
YELLOWTAIL FLOUNDER	3N	NOV	8	1899	825	64	29 - 49
YELLOWTAIL FLOUNDER	3N	DEC	3	1200	484	-	-
YELLOWTAIL FLOUNDER	3O	MAY	1	221	83	-	-
YELLOWTAIL FLOUNDER	3O	SEP	1	156	99	-	-
YELLOWTAIL FLOUNDER	3O	NOV	1	177	73	-	-
YELLOWTAIL FLOUNDER	3O	DEC	1	229	86	-	-
GREENLAND HALIBUT	3L	FEB	9	2321	2120	279	32 - 91
GREENLAND HALIBUT	3L	MAR	20	5270	4905	331	32 - 89
GREENLAND HALIBUT	3L	APR	15	5108	3752	101	30 - 69
GREENLAND HALIBUT	3L	MAY	8	2964	2268	-	-
GREENLAND HALIBUT	3L	JUL	14	3697	3350	361	25 - 85
GREENLAND HALIBUT	3L	AUG	17	4849	4771	344	33 - 90
GREENLAND HALIBUT	3L	SEP	7	2061	1822	216	30 - 86
GREENLAND HALIBUT	3M	FEB	6	1618	1370	217	34 - 79
GREENLAND HALIBUT	3M	MAR	13	3255	2942	301	30 - 87
GREENLAND HALIBUT	3M	APR	15	4978	4059	162	33 - 70
GREENLAND HALIBUT	3M	MAY	10	3478	2812	-	-
GREENLAND HALIBUT	3M	JUL	7	1473	1474	288	32 - 86
GREENLAND HALIBUT	3M	AUG	8	2201	1689	150	32 - 87
GREENLAND HALIBUT	3M	SEP	4	784	787	54	39 - 91
GREENLAND HALIBUT	3N	MAR	2	482	491	154	36 - 86
GREENLAND HALIBUT	3N	MAY	7	2323	2495	-	-
GREENLAND HALIBUT	3N	JUL	4	701	902	157	26 - 92
GREENLAND HALIBUT	3N	AUG	2	597	474	-	-
GREENLAND HALIBUT	3N	SEP	1	272	175	-	-
GREENLAND HALIBUT	3N	NOV	9	2104	1754	50	33 - 77
GREENLAND HALIBUT	3N	DEC	1	393	298	-	-
GREENLAND HALIBUT	3O	OCT	1	142	112	-	-
GREENLAND HALIBUT	3O	NOV	1	112	74	-	-

TABLE V: count.

SPECIES	DIV.	MONTH	Nº OF SAMPLES	Nº FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS Nº	OTOLITHS LENGTH RANGE (cm)
ROUGHHEAD GRENADIER	3L	FEB	8	1314	617	260	6.5 - 31.5
ROUGHHEAD GRENADIER	3L	MAR	17	3939	1689	251	7.5 - 29
ROUGHHEAD GRENADIER	3L	APR	11	2964	1064	-	-
ROUGHHEAD GRENADIER	3L	MAY	7	2348	1056	-	-
ROUGHHEAD GRENADIER	3L	JUL	14	2801	1222	267	7 - 29
ROUGHHEAD GRENADIER	3L	AUG	17	4839	2207	293	8 - 32
ROUGHHEAD GRENADIER	3L	SEP	7	1450	775	215	7 - 33
ROUGHHEAD GRENADIER	3M	FEB	3	603	223	208	7 - 26
ROUGHHEAD GRENADIER	3M	MAR	13	2734	1029	150	6.5 - 23.5
ROUGHHEAD GRENADIER	3M	APR	13	3846	1514	-	-
ROUGHHEAD GRENADIER	3M	MAY	8	2657	882	-	-
ROUGHHEAD GRENADIER	3M	JUL	6	1214	534	211	7.5 - 30
ROUGHHEAD GRENADIER	3M	AUG	5	1439	782	60	7 - 36
ROUGHHEAD GRENADIER	3M	SEP	2	455	200	59	7 - 28
ROUGHHEAD GRENADIER	3N	MAR	2	336	262	123	9 - 32
ROUGHHEAD GRENADIER	3N	MAY	6	2361	1076	-	-
ROUGHHEAD GRENADIER	3N	JUL	4	782	475	140	8.5 - 30
ROUGHHEAD GRENADIER	3N	AUG	2	556	226	-	-
ROUGHHEAD GRENADIER	3N	NOV	8	2120	906	50	9 - 27.5
ROUGHHEAD GRENADIER	3N	DEC	1	274	99	-	-
WITCH FLOUNDER	3L	FEB	3	343	187	101	29 - 57
WITCH FLOUNDER	3L	MAR	10	1192	574	152	26 - 58
WITCH FLOUNDER	3L	APR	11	1393	652	-	-
WITCH FLOUNDER	3L	MAY	7	987	423	-	-
WITCH FLOUNDER	3L	AUG	1	109	53	-	-
WITCH FLOUNDER	3M	FEB	4	343	174	59	27 - 55
WITCH FLOUNDER	3M	MAR	10	1354	657	172	26 - 58
WITCH FLOUNDER	3M	APR	12	2066	1011	116	27 - 56
WITCH FLOUNDER	3M	MAY	10	2254	1023	-	-
WITCH FLOUNDER	3M	JUL	2	297	155	-	-
WITCH FLOUNDER	3N	MAR	2	267	119	-	-
WITCH FLOUNDER	3N	MAY	6	1120	594	-	-
WITCH FLOUNDER	3N	JUL	3	353	172	41	33 - 52
WITCH FLOUNDER	3N	AUG	1	168	71	-	-
WITCH FLOUNDER	3N	SEP	1	208	104	-	-
WITCH FLOUNDER	3N	NOV	3	489	210	-	-
WITCH FLOUNDER	3O	JUL	1	154	76	-	-
WITCH FLOUNDER	3O	SEP	1	140	68	-	-
WITCH FLOUNDER	3O	OCT	1	204	76	-	-
WITCH FLOUNDER	3O	NOV	7	1325	542	-	-
WITCH FLOUNDER	3O	DEC	8	1521	556	-	-
ATLANTIC HALIBUT	3O	OCT	1	3	39	3	72 - 97
RED HAKE	3N	OCT	1	76	101	-	-
RED HAKE	3O	OCT	3	192	154	144	21 - 70
RED HAKE	3O	NOV	20	2338	2221	103	21 - 60
RED HAKE	3O	DEC	9	1358	1153	-	-

TABLE VI: COD, DIV. 3L, 2001: length composition of the trawl catches.

LENGTH GROUP	APR =YEAR	LENGTH GROUP
27	4.0	27
30	10.0	30
33	60.1	33
36	165.0	36
39	171.6	39
42	225.9	42
45	149.5	45
48	93.2	48
51	28.0	51
54	11.0	54
57	29.3	57
60	18.5	60
63	14.5	63
66	1.7	66
69	2.8	69
72	8.1	72
75	4.0	75
78	1.7	78
81	1.1	81
TOTAL	1000	

No. SAMPLES	3
SAMPLING WEIGHT(kg)	506
No. F.MEASURED	468
MEAN LENGTH(cm)	44.3
MEAN WEIGHT (g)	820
DEPTH RANGE (m)	617/826

TABLE VII - A: COD, DIV. 3M, 2001: length composition of the trawl catches.

LENGTH GROUP	JUL =YEAR	LENGTH GROUP
30	87.0	30
33	173.9	33
36	130.4	36
39	130.4	39
42		42
45		45
48		48
51		51
54	87.0	54
57	130.4	57
60		60
63		63
66	87.0	66
69		69
72		72
75	43.5	75
78	87.0	78
81	43.5	81
TOTAL	1000	

No. SAMPLES	1
SAMPLING WEIGHT(kg)	48
No. F.MEASURED	23
MEAN LENGTH(cm)	51.1
MEAN WEIGHT (g)	1596
DEPTH RANGE (m)	176/210

TABLE VII - B: COD, DIV.3M, 2001: age composition (‰), mean length (cm) and mean weight (Kg) at age of the trawl catches.

AGE	JUL.= YEAR AGE COMP.	MEAN LENGTH	MEAN WEIGHT	AGE
2	43.5	37.0	0.458	2
3	391.3	34.7	0.384	3
4	217.4	50.2	1.219	4
5	87.0	56.5	1.605	5
6				6
7	173.9	72.3	3.368	7
8				8
9				9
10	43.5	79.0	4.318	10
11				11
12	43.5	82.0	4.822	12
TOTAL	1000			

TABLE VIII - A: COD, DIV. 3N, 2001: length composition of the trawl catches.

LENGTH GROUP	MAY	JUL	AUG	SEP	OCT	NOV	DEC	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
24		10.1	9.9						4.2		2.5	24
27		20.2					4.5		8.0	4.0	6.3	27
30	105.3	67.1	19.8	14.2			8.6	105.3	35.1	7.8	24.6	30
33	184.2	122.4	19.8	65.7		7.9	16.8	184.2	87.0	15.9	59.0	33
36	105.3	151.1	69.3	87.0	40.0	42.2	11.5	105.3	111.8	14.3	72.3	36
39	144.7	182.2	168.3	140.8		47.1	36.2	144.7	157.7	36.8	108.7	39
42	65.8	182.5	138.6	214.6	280.0	37.2	108.7	65.8	200.3	104.3	160.4	42
45	171.1	128.8	277.2	180.3	160.0	116.6	275.7	171.1	162.2	261.4	202.4	45
48	157.9	88.4	128.7	136.7	80.0	121.6	196.3	157.9	117.5	189.0	146.7	48
51	26.3	7.7	89.1	62.3	240.0	82.8	96.0	26.3	41.4	96.2	63.5	51
54		20.9	39.6	19.2	120.0	77.1	69.1		20.3	70.2	40.4	54
57		10.1	9.9	26.7	40.0	32.3	46.4		19.8	45.2	29.9	57
60		0.7	9.9	14.2		22.2	61.6		8.8	57.8	28.5	60
63		5.1	9.9	9.6	40.0	48.2	22.1		7.8	24.4	14.5	63
66			9.9	13.9		18.4	6.8		8.3	7.7	8.0	66
69				9.7		54.8	19.4		5.7	22.2	12.3	69
72		0.7		5.1		64.9	10.1		3.2	14.6	7.8	72
75						37.2	8.6			10.9	4.4	75
78	13.2	0.7				57.2	1.1	13.2	0.3	5.8	2.6	78
81	13.2	1.3				19.4	0.6	13.2	0.5	2.1	1.3	81
84	13.2					29.2		13.2		2.4	1.1	84
87						25.9				2.2	0.9	87
90						13.6				1.1	0.5	90
93						7.7				0.6	0.3	93
96						16.6				1.4	0.6	96
99						16.2				1.3	0.5	99
102						3.7				0.3	0.1	102
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	3	1	7	1	6	3	1	11	10	22	
SAMPLING WEIGHT(kg)	89	322	119	1003	32	814	761	89	1443	1607	3139	
No. F.MEASURED	76	325	101	993	25	197	563	76	1419	785	2280	
MEAN LENGTH(cm)	42.8	41.3	45.6	45.6	49.3	61.1	50.3	42.8	43.9	51.2	46.8	
MEAN WEIGHT (g)	806	647	864	880	1074	2489	1187	806	788	1294	993	
DEPTH RANGE (m)	403/525	50/476	126/759	61/117	343/364	52/199	63/190	403/525	50/759	52/364	50/759	

TABLE VIII - B: COD, DIV. 3N, 2001: length composition of the trawl catches (300 mm).

LENGTH GROUP	JUL =3rd Q.	NOV =4th Q.	YEAR	LENGTH GROUP
33		28.1	22.5	33
36		67.3	53.8	36
39		169.4	135.5	39
42		207.4	165.9	42
45		167.0	133.6	45
48		60.6	48.5	48
51	148.6	33.8	56.8	51
54	81.1	29.2	39.5	54
57	40.5	23.6	27.0	57
60		48.2	38.5	60
63	13.5	14.6	14.4	63
66	40.5	19.1	23.4	66
69				69
72	13.5	33.8	29.7	72
75	13.5	13.5	13.5	75
78	121.6	20.3	40.6	78
81	162.2	10.1	40.6	81
84	40.5	16.9	21.6	84
87	162.2		32.4	87
90	40.5	10.1	16.2	90
93	13.5		2.7	93
96	40.5	13.5	18.9	96
99	27.0	6.8	10.8	99
102	13.5	6.8	8.1	102
105	27.0		5.4	105
TOTAL	1000	1000	1000	
No. SAMPLES	1	3	4	
SAMPLING WEIGHT(kg)	568	504	1072	
No. F.MEASURED	74	221	295	
MEAN LENGTH(cm)	77.1	51.1	56.3	
MEAN WEIGHT (g)	4631	1520	2143	
DEPTH RANGE (m)	60/64	52/92	52/92	

TABLE IX: COD, DIV. 3O, 2001: length composition of the trawl catches.

LENGTH GROUP	MAY	JUL	SEP	OCT	NOV	DEC	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
24					1.0	1.4			1.2	1.1	24
27					2.2	4.0			3.1	2.9	27
30	11.0		2.3		12.0	8.1	11.0	0.9	9.5	9.0	30
33	33.0	5.4	52.9	7.5	43.4	30.9	33.0	23.3	35.5	34.7	33
36	33.0	48.4	173.4	10.6	57.0	53.4	33.0	95.5	53.8	56.0	36
39	54.9	65.6	187.0	21.2	161.3	102.2	54.9	111.4	124.6	122.6	39
42	87.9	105.6	234.2	123.5	160.2	153.0	87.9	154.1	155.2	154.0	42
45	120.9	94.3	213.9	317.9	159.5	261.3	120.9	139.4	220.7	214.0	45
48	98.9	89.3	99.4	120.3	122.1	187.0	98.9	93.1	158.6	153.6	48
51	65.9	243.1	22.7	174.6	99.1	76.1	65.9	160.0	88.0	92.0	51
54	11.0	158.6		75.5	55.8	31.3	11.0	98.8	42.5	45.4	54
57	54.9	111.4	2.3	81.0	32.0	22.4	54.9	70.3	27.8	30.9	57
60	98.9	52.3	2.3	13.7	24.6	23.8	98.9	33.4	23.9	25.7	60
63	44.0	20.7	4.7	15.0	12.8	12.9	44.0	14.7	12.9	13.5	63
66	65.9	5.4	4.8	18.1	15.9	13.5	65.9	5.2	14.6	14.9	66
69	109.9			3.1	9.2	7.1	109.9		7.9	9.1	69
72	44.0			10.6	13.9	4.1	44.0		8.3	8.4	72
75	33.0			7.5	4.0	4.7	33.0		4.5	4.7	75
78	22.0				7.0	0.9	22.0		3.4	3.5	78
81	11.0				2.4	0.9	11.0		1.5	1.6	81
84					1.5	0.9			1.1	1.1	84
87					1.3				0.5	0.5	87
90					0.3				0.1	0.1	90
93					1.5				0.6	0.6	93
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	5	6	2	20	9	1	11	31	43	
SAMPLING WEIGHT(kg)	193	312	383	226	2448	1363	193	695	4037	4925	
No. F.MEASURED	91	197	399	157	1812	1182	91	596	3151	3838	
MEAN LENGTH(cm)	56.1	51.0	43.1	50.3	47.8	47.3	56.1	48.1	47.6	47.8	
MEAN WEIGHT (g)	1785	1209	711	1163	1062	985	1785	1021	1021	1034	
DEPTH RANGE (m)	369/383	95/501	200/547	355/430	68/511	166/492	369/383	95/547	68/511	68/547	

TABLE X: REDFISH (*S. mentella*), DIV. 3L, 2001: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUL	AUG	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
11					3.4				1.4	0.04	11
12											12
13					13.7				5.4	0.2	13
14					6.8				2.7	0.1	14
15											15
16					13.7				5.4	0.2	16
17					46.2				18.4	0.5	17
18					27.4				10.9	0.3	18
19					32.5	3.2			14.9	0.4	19
20					6.8	9.6			8.5	0.3	20
21			0.5	9.8	3.4	77.1		1.0	47.8	2.2	21
22			2.0	39.3		109.2		3.9	65.7	5.1	22
23		3.6	8.7	60.3		118.8	2.2	11.3	71.5	11.6	23
24	18.6	11.3	14.3	56.4	15.4	56.9	14.2	16.4	40.4	16.8	24
25	53.5	35.3	44.3	65.2	27.4	57.8	42.6	45.4	45.7	44.9	25
26	71.7	90.1	92.4	65.7	51.4	73.7	82.7	91.1	64.8	88.9	26
27	104.2	127.5	121.1	84.3	73.7	30.2	118.1	119.2	47.5	116.9	27
28	159.4	149.4	157.1	131.4	65.1	45.1	153.4	155.8	53.1	152.4	28
29	123.1	144.9	147.2	122.6	63.4	55.1	136.1	146.0	58.4	141.8	29
30	160.1	131.8	153.0	143.5	78.8	45.3	143.1	152.5	58.6	148.2	30
31	128.2	114.4	93.9	69.3	70.2	48.7	119.9	92.7	57.2	96.1	31
32	96.9	56.9	66.1	38.4	90.8	56.9	73.0	64.7	70.4	66.2	32
33	39.5	47.7	45.6	13.2	104.5	42.6	44.4	43.9	67.2	44.7	33
34	23.9	36.2	23.2	20.3	75.4	21.3	31.3	23.0	42.8	25.0	34
35	14.0	19.2	13.3	12.0	59.9	11.5	17.1	13.2	30.8	14.4	35
36	5.8	16.5	7.4	5.9	32.5	33.9	12.2	7.3	33.3	8.9	36
37	1.2	9.7	4.4	19.4	3.4	18.8	6.3	5.2	12.7	5.6	37
38		4.5	2.1	17.1	27.4	36.9	2.7	2.9	33.1	3.8	38
39			2.2	8.5	3.4	24.9		2.5	16.3	2.5	39
40		1.2	0.9	7.4		11.3	0.7	1.2	6.8	1.3	40
41			0.2	7.4	3.4	6.8		0.6	5.4	0.6	41
42				2.5		4.5		0.1	2.7	0.2	42
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	5	13	3	4	3	7	16	7	30	
SAMPLING WEIGHT(kg)	164	366	1434	227	90	135	530	1661	225	2416	
No. F.MEASURED	412	922	3695	623	172	343	1334	4318	515	6167	
MEAN LENGTH(cm)	29.7	29.9	29.6	29.0	29.3	28.3	29.8	29.5	28.7	29.6	
MEAN WEIGHT (g)	389	395	383	373	409	370	393	382	386	384	
DEPTH RANGE (m)	815/1107	853/945	789/1137	715/1181	740/1058	493/975	815/1107	715/1181	493/1058	493/1181	

TABLE XI - A: REDFISH (*S. mentella*), DIV. 3M, 2001: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUL	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
15							4.9			1.3	0.8	15
16							1.9			0.5	0.3	16
17						0.04	5.2			1.4	0.9	17
18						1.1	10.1			3.3	2.2	18
19				0.6		0.8	17.2		0.3	5.0	3.3	19
20			0.3	5.4	11.3	0.6	16.6		2.4	5.3	4.1	20
21			1.4	11.6	22.6	3.3	7.1		5.6	5.4	4.9	21
22			1.7	14.5	75.4	5.7	18.5		7.0	13.0	10.2	22
23	1.3	2.5	9.5	23.0	56.6	18.8	15.9	1.7	15.1	20.2	17.0	23
24	4.9	8.7	14.7	34.0	73.7	28.4	55.4	6.2	22.7	38.0	30.9	24
25	34.8	25.2	34.8	49.1	64.2	78.3	80.4	31.6	40.7	78.1	64.0	25
26	90.7	81.4	67.0	80.3	74.4	176.9	101.6	87.6	72.5	151.5	125.3	26
27	112.9	99.0	109.0	103.2	70.7	203.1	84.4	108.3	106.6	164.7	144.5	27
28	149.1	141.2	174.6	126.6	98.7	182.0	118.5	146.5	154.8	160.7	157.8	28
29	142.3	170.7	150.9	119.6	79.1	116.3	101.3	151.7	138.0	110.3	121.5	29
30	165.5	163.7	127.8	154.4	85.0	80.3	82.0	164.9	138.8	81.0	104.0	30
31	87.2	91.1	98.3	92.1	52.2	39.0	51.2	88.5	95.7	42.9	60.7	31
32	76.9	61.6	73.2	64.5	38.5	20.2	58.2	71.8	69.6	31.1	44.9	32
33	58.9	59.6	55.6	49.9	40.7	14.6	43.6	59.1	53.3	23.6	34.7	33
34	33.1	38.0	37.6	31.1	25.1	10.5	42.3	34.7	34.9	19.6	25.0	34
35	22.1	31.3	17.8	14.8	19.2	8.4	19.7	25.1	16.6	11.9	14.4	35
36	9.6	15.1	8.3	6.8	19.4	1.8	14.8	11.4	7.7	6.2	7.1	36
37	2.9	4.5	8.4	5.6	17.4	2.2	13.3	3.4	7.2	5.9	6.0	37
38	2.4	3.2	3.5	5.0	17.4	3.4	21.1	2.7	4.1	8.8	7.0	38
39	3.5	1.7	3.0	2.4	15.5	1.5	6.3	2.9	2.8	3.6	3.3	39
40	0.4	1.2	1.2	3.1	9.7	0.5	4.2	0.7	2.0	2.0	1.8	40
41	0.8		0.9	1.1	3.9	1.0		0.5	1.0	0.9	0.9	41
42	0.3	0.3	0.6	0.5	5.8	0.9	2.1	0.3	0.6	1.5	1.1	42
43				0.1	1.9	0.4	2.1		0.03	0.9	0.6	43
44	0.4			0.6	5.8	0.04		0.3	0.3	0.4	0.3	44
45					3.9					0.2	0.1	45
46					5.8					0.3	0.2	46
47					1.9					0.1	0.1	47
48					3.9	0.04				0.2	0.2	48
49												49
50						0.04				0.03	0.02	50
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	5	7	15	10	2	8	2	12	25	12	49	
SAMPLING WEIGHT(kg)	563	577	1717	1382	208	850	227	1140	3099	1285	5524	
No. F.MEASURED	1414	1389	4537	3533	522	2173	620	2803	8070	3315	14188	
MEAN LENGTH(cm)	30.0	30.1	29.9	29.4	29.2	28.2	28.9	30.0	29.7	28.4	28.9	
MEAN WEIGHT (g)	391	397	390	374	389	328	367	393	383	341	357	
DEPTH RANGE (m)	746/989	594/1079	851/1106	828/1008	270/314	293/1090	311/439	594/1079	828/1106	270/1090	270/1106	

TABLE XI - B: REDFISH (S.mentella), DIV.3M, 2001: age composition (‰), mean length (cm) and mean weight (Kg) at age of the trawl catches.

AGE	FEB. AGE COMP.	FEB. MEAN LENGTH	FEB. MEAN WEIGHT	MAR. AGE COMP.	MAR. MEAN LENGTH	MAR. MEAN WEIGHT	APR. AGE COMP.	APR. MEAN LENGTH	APR. MEAN WEIGHT	MAY AGE COMP.	MAY MEAN LENGTH	MAY MEAN WEIGHT	JUL. AGE COMP.	JUL. MEAN LENGTH	JUL. MEAN WEIGHT	AUG. AGE COMP.	AUG. MEAN LENGTH	AUG. MEAN WEIGHT	AGE
3																0.01	17.5	0.078	3
4										1.1	20.2	0.120	0.9	20.5	0.125	1.6	19.0	0.099	4
5				0.4	23.5	0.187	4.1	22.8	0.172	23.6	21.9	0.152	53.7	21.9	0.153	12.6	22.6	0.168	5
6	6.5	24.9	0.223	7.7	24.7	0.216	15.0	23.9	0.198	43.6	23.6	0.190	134.7	23.2	0.181	28.3	24.0	0.199	6
7	57.2	26.1	0.255	49.1	26.1	0.254	55.9	25.9	0.249	81.9	25.6	0.242	115.5	25.3	0.233	123.7	25.8	0.247	7
8	128.5	27.3	0.292	115.7	27.3	0.292	118.3	27.5	0.296	114.8	27.3	0.292	91.7	27.2	0.289	224.2	27.2	0.288	8
9	88.8	28.5	0.329	89.9	28.6	0.336	98.2	28.6	0.334	78.1	28.5	0.330	45.7	28.2	0.322	104.0	28.1	0.318	9
10	105.3	29.9	0.379	115.5	29.8	0.378	104.3	29.8	0.377	90.8	29.9	0.381	65.5	29.8	0.377	81.6	29.6	0.370	10
11	453.8	30.2	0.393	436.3	30.1	0.390	434.6	30.0	0.389	416.6	30.1	0.390	299.2	29.9	0.386	366.8	28.9	0.348	11
12	74.7	32.6	0.492	87.8	32.8	0.501	81.1	32.7	0.494	72.7	32.6	0.493	29.3	32.5	0.485	24.6	32.5	0.488	12
13	29.8	34.0	0.556	27.8	34.5	0.580	34.3	34.6	0.587	28.1	34.5	0.583	32.6	34.6	0.587	8.9	34.2	0.568	13
14	14.2	35.2	0.615	23.8	35.2	0.618	13.4	35.0	0.607	13.3	35.0	0.606	9.8	35.6	0.639	4.3	35.1	0.608	14
15	18.3	35.5	0.632	20.6	35.6	0.638	16.9	35.5	0.632	13.6	35.6	0.639	19.2	35.6	0.637	5.6	35.5	0.631	15
16	11.6	34.3	0.572	14.2	34.6	0.587	10.9	34.0	0.560	7.8	33.8	0.549	10.9	35.8	0.646	4.0	34.4	0.576	16
17	2.7	37.5	0.744	5.0	37.3	0.733	3.6	38.0	0.773	4.6	38.3	0.788	15.5	38.0	0.772	2.4	38.4	0.796	17
18	2.1	37.5	0.741	1.8	37.5	0.741	2.7	37.5	0.741	0.6	37.5	0.741	11.6	37.5	0.741	1.8	37.5	0.741	18
19+	6.5	40.1	0.909	4.3	39.7	0.880	6.5	40.1	0.908	8.6	40.6	0.939	64.1	42.3	1.076	5.5	40.7	0.949	19+
TOTAL	1000			1000			1000			1000			1000			1000			

AGE	SEP. AGE COMP.	SEP. MEAN LENGTH	SEP. MEAN WEIGHT	1st Q. AGE COMP.	1st Q. MEAN LENGTH	1st Q. MEAN WEIGHT	2nd Q. AGE COMP.	2nd Q. MEAN LENGTH	2nd Q. MEAN WEIGHT	3rd Q. AGE COMP.	3rd Q. MEAN LENGTH	3rd Q. MEAN WEIGHT	YEAR AGE COMP.	YEAR MEAN LENGTH	YEAR MEAN WEIGHT	AGE
3	7.5	16.0	0.060							1.9	16.0	0.060	1.3	16.0	0.060	3
4	28.2	18.9	0.099				0.5	20.2	0.120	8.5	18.9	0.099	5.6	19.0	0.100	4
5	35.2	21.1	0.136	0.1	23.5	0.187	12.2	22.1	0.156	20.8	21.8	0.152	16.5	21.9	0.153	5
6	41.7	23.6	0.190	6.9	24.8	0.220	26.8	23.7	0.193	37.9	23.7	0.193	31.9	23.7	0.193	6
7	120.1	25.4	0.237	54.5	26.1	0.255	66.6	25.8	0.246	122.3	25.7	0.244	101.5	25.7	0.245	7
8	118.0	27.2	0.288	124.3	27.3	0.292	116.9	27.4	0.294	189.1	27.2	0.288	164.5	27.2	0.289	8
9	79.6	28.4	0.326	89.1	28.5	0.332	90.0	28.6	0.333	94.3	28.2	0.320	92.7	28.3	0.324	9
10	65.1	29.7	0.372	108.7	29.8	0.378	98.7	29.8	0.379	76.4	29.6	0.371	85.3	29.7	0.374	10
11	307.9	29.6	0.375	448.1	30.1	0.392	427.2	30.0	0.389	347.7	29.1	0.356	377.8	29.5	0.370	11
12	71.1	32.9	0.506	79.0	32.7	0.495	77.6	32.6	0.493	37.0	32.7	0.497	51.4	32.7	0.495	12
13	35.5	35.3	0.622	29.2	34.1	0.564	31.7	34.5	0.585	17.2	34.8	0.599	22.0	34.6	0.589	13
14	26.9	35.2	0.618	17.3	35.2	0.616	13.3	35.0	0.606	10.5	35.2	0.616	11.9	35.2	0.613	14
15	12.7	35.4	0.628	19.1	35.6	0.634	15.5	35.6	0.634	8.2	35.5	0.631	11.2	35.5	0.633	15
16	9.6	34.4	0.578	12.4	34.4	0.577	9.6	34.0	0.556	5.8	34.5	0.585	7.4	34.3	0.574	16
17	16.9	38.0	0.772	3.5	37.4	0.739	4.1	38.1	0.780	6.9	38.1	0.778	5.8	38.1	0.776	17
18	0.6	37.5	0.741	2.0	37.5	0.741	1.9	37.5	0.741	2.0	37.5	0.741	2.0	37.5	0.741	18
19+	23.3	40.0	0.898	5.8	40.0	0.902	7.4	40.3	0.923	13.5	40.8	0.961	11.2	40.7	0.951	19+
TOTAL	1000			1000			1000			1000			1000			

TABLE XII: REDFISH (*S. mentella*), DIV. 3N, 2001: length composition of the trawl catches.

LENGTH GROUP	MAY	JUL	AUG	SEP	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
18			5.4					0.3		0.1	18
19											19
20				7.1				5.5		2.5	20
21		0.2		33.2	35.2			25.5	1.7	12.7	21
22				40.4	31.7			30.9	1.5	15.1	22
23		0.2	5.4	80.0	73.9	9.3		61.6	12.3	35.0	23
24	5.5	2.0	10.9	78.4	59.9	13.9	5.5	61.0	16.1	36.8	24
25	49.9	4.7	32.6	89.4	81.0	38.1	49.9	71.1	40.2	54.5	25
26	80.3	23.3	38.0	63.4	56.3	92.8	80.3	54.9	91.1	74.3	26
27	160.7	58.7	87.0	84.5	84.5	121.2	160.7	80.1	119.5	101.5	27
28	227.1	70.7	43.5	93.9	98.6	149.4	227.1	86.9	147.0	119.6	28
29	163.4	151.7	81.5	112.2	147.9	153.9	163.4	117.6	153.7	137.0	29
30	152.4	197.8	130.4	94.9	102.1	144.1	152.4	115.3	142.1	129.8	30
31	44.3	110.1	125.0	53.2	84.5	111.9	44.3	67.3	110.6	90.3	31
32	36.0	76.9	125.0	37.5	42.3	43.5	36.0	49.3	43.5	46.2	32
33	66.5	26.5	114.1	24.6	17.6	31.3	66.5	29.9	30.7	30.5	33
34	2.8	25.3	92.4	16.6	14.1	24.7	2.8	22.4	24.2	23.2	34
35		22.9	48.9	17.4	17.6	16.3		20.1	16.3	18.0	35
36	5.5	26.0	32.6	17.4	7.0	14.7	5.5	19.7	14.3	16.8	36
37		49.4	10.9	12.0	21.1	12.5		18.6	12.9	15.5	37
38		59.5	10.9	17.7	14.1	13.9		24.8	13.9	18.9	38
39	5.5	34.5	5.4	10.4	7.0	7.3	5.5	14.4	7.2	10.6	39
40		33.9		8.5	3.5	1.2		12.6	1.3	6.5	40
41		14.6		3.8				5.5		2.6	41
42		7.0		3.0				3.5		1.6	42
43		2.0		0.6				0.8		0.4	43
44											44
45		2.0						0.4		0.2	45
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	3	1	4	1	2	1	8	3	12	
SAMPLING WEIGHT(kg)	127	351	86	654	99	327	127	1090	426	1643	
No. F.MEASURED	361	728	184	1777	284	822	361	2689	1106	4156	
MEAN LENGTH(cm)	29.2	32.4	31.3	28.5	28.6	29.8	29.2	29.3	29.8	29.6	
MEAN WEIGHT (g)	367	512	461	359	358	395	367	392	393	393	
DEPTH RANGE (m)	893/924	208/1035	126/759	415/603	364/438	440/518	893/924	126/1035	364/518	126/1035	

TABLE XIII: REDFISH (*S. mentella*), DIV. 3O, 2001: length composition of the trawl catches.

LENGTH GROUP	MAY	JUL	AUG	SEP	OCT	NOV	DEC	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
16						0.1	0.2			0.1	0.1	16
17			16.5	2.0	2.2	0.5	2.0		2.5	0.9	1.5	17
18	2.5	0.6	38.5	5.9	4.3	1.7	8.2	2.5	6.8	3.0	4.5	18
19	5.0	1.7	60.4	16.3	30.0	8.1	18.0	5.0	14.8	12.8	13.2	19
20	57.8	17.4	148.4	56.6	83.0	44.1	45.2	57.8	50.3	50.0	50.5	20
21	123.1	59.7	197.8	127.3	143.6	105.9	127.8	123.1	109.0	114.7	112.9	21
22	256.3	123.8	225.3	225.9	192.3	193.0	223.8	256.3	189.2	197.4	197.3	22
23	203.5	127.9	170.3	185.1	199.4	192.7	212.6	203.5	163.3	196.6	183.7	23
24	193.5	148.9	93.4	169.4	132.5	139.7	129.0	193.5	155.6	137.1	147.4	24
25	103.0	127.8	38.5	94.4	84.6	103.7	76.3	103.0	101.6	96.9	99.1	25
26	27.6	73.6	11.0	40.0	31.8	51.8	43.4	27.6	49.6	47.6	47.4	26
27	20.1	66.2		27.1	25.6	40.8	28.5	20.1	38.8	36.7	36.7	27
28		48.1		10.4	14.7	21.9	18.2		23.0	20.3	20.3	28
29	2.5	40.6		14.2	18.7	24.5	13.1	2.5	22.5	22.0	21.2	29
30		34.0		6.0	12.3	18.9	18.6		15.5	17.9	16.0	30
31	2.5	24.6		7.1	9.0	11.9	8.5	2.5	12.8	11.0	11.2	31
32		23.3		2.5	5.1	7.8	7.2		9.7	7.3	7.9	32
33	2.5	12.2		3.4	7.6	6.2	4.9	2.5	6.2	6.2	6.0	33
34		7.5		1.8	2.4	4.5	4.2		3.7	4.1	3.7	34
35		9.8			0.7	2.9	3.5		3.5	2.6	2.8	35
36		10.9		1.0	0.4	7.2	1.3		4.5	5.3	4.7	36
37		9.7		0.7		4.7	1.5		3.9	3.5	3.5	37
38		9.3		1.3		5.8	1.5		4.1	4.3	4.0	38
39		7.7		1.6		0.7	1.5		3.7	0.7	1.8	39
40		6.6				0.9	0.8		2.4	0.7	1.3	40
41		3.0				0.2			1.1	0.1	0.5	41
42		3.2							1.2		0.5	42
43		1.1							0.4		0.2	43
44		0.3							0.1		0.04	44
45												45
46		0.5							0.2		0.1	46
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	6	1	7	3	20	9	1	14	32	47	
SAMPLING WEIGHT(kg)	72	671	54	612	331	1886	837	72	1337	3054	4464	
No. F.MEASURED	398	2178	364	3203	1450	7921	3378	398	5745	12749	18892	
MEAN LENGTH(cm)	23.4	26.3	22.1	23.7	23.6	24.6	24.0	23.4	24.5	24.3	24.4	
MEAN WEIGHT (g)	189	288	160	200	199	227	209	189	228	220	222	
DEPTH RANGE (m)	300/375	95/501	365/444	139/547	100/370	68/511	164/492	300/375	95/547	68/511	68/547	

TABLE XIV: REDFISH (*S. marinus*), DIV. 3M, 2001: length composition of the trawl catches.

LENGTH GROUP	AUG	SEP	3rd Q. =YEAR	LENGTH GROUP
16		7.7	1.2	16
17		15.4	2.3	17
18	1.3	15.4	3.5	18
19				19
20	1.7	7.7	2.6	20
21	0.9	53.8	9.0	21
22	5.6	7.7	5.9	22
23	7.0	61.5	15.3	23
24	13.2	69.2	21.7	24
25	69.3	107.7	75.2	25
26	141.8	107.7	136.6	26
27	146.8	76.9	136.2	27
28	156.8	161.5	157.6	28
29	177.5	84.6	163.3	29
30	129.0	107.7	125.7	30
31	80.3	61.5	77.5	31
32	25.5	38.5	27.4	32
33	18.8	15.4	18.3	33
34	8.0		6.8	34
35	7.0		5.9	35
36	4.0		3.4	36
37	1.3		1.1	37
38				38
39	1.3		1.1	39
40	1.3		1.1	40
41				41
42	1.3		1.1	42
TOTAL	1000	1000	1000	
No. SAMPLES	5	1	6	
SAMPLING WEIGHT(kg)	285	41	326	
No. F.MEASURED	769	130	899	
MEAN LENGTH(cm)	28.8	27.1	28.5	
MEAN WEIGHT (g)	357	302	349	
DEPTH RANGE (m)	293/401	311/380	293/401	

TABLE XV: REDFISH (*S. marinus*), DIV. 3N, 2001: length composition of the trawl catches.

LENGTH GROUP	MAY	JUL	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
18	4.5		4.5		1.1	18
19	4.5		4.5		1.1	19
20	22.4	3.4	22.4	3.4	8.0	20
21	53.8	25.6	53.8	25.6	32.4	21
22	58.3	22.2	58.3	22.2	30.9	22
23	127.8	44.4	127.8	44.4	64.5	23
24	91.9	37.6	91.9	37.6	50.7	24
25	83.0	47.8	83.0	47.8	56.3	25
26	85.2	39.3	85.2	39.3	50.4	26
27	98.7	51.8	98.7	51.8	63.1	27
28	78.5	61.4	78.5	61.4	65.5	28
29	85.2	151.6	85.2	151.6	135.6	29
30	96.4	213.4	96.4	213.4	185.1	30
31	49.3	144.1	49.3	144.1	121.2	31
32	40.4	78.3	40.4	78.3	69.1	32
33	13.5	18.2	13.5	18.2	17.0	33
34	4.5	13.6	4.5	13.6	11.4	34
35	2.2	14.8	2.2	14.8	11.8	35
36		8.0		8.0	6.0	36
37		10.8		10.8	8.2	37
38		7.4		7.4	5.6	38
39		4.5		4.5	3.4	39
40		1.7		1.7	1.3	40
TOTAL	1000	1000	1000	1000	1000	
No. SAMPLES	1	2	1	2	3	
SAMPLING WEIGHT(kg)	123	177	123	177	300	
No. F.MEASURED	446	458	446	458	904	
MEAN LENGTH(cm)	26.7	29.4	26.7	29.4	28.8	
MEAN WEIGHT (g)	290	384	290	384	362	
DEPTH RANGE (m)	57/65	208/453	57/65	208/453	57/453	

TABLE XVI: REDFISH (*S. marinus*), DIV. 3O, 2001: length composition of the trawl catches.

LENGTH GROUP	JUL	AUG	SEP	OCT	NOV	DEC	3rd Q.	4th Q.	YEAR	LENGTH GROUP
17			2.2	4.5	0.1		0.9	1.3	1.2	17
18	1.9		5.3	11.6	0.3	0.4	3.2	3.3	3.3	18
19	5.5		11.4	17.6	6.6	5.6	7.6	9.3	9.0	19
20	27.6	21.1	34.7	45.9	26.0	19.3	30.2	30.0	30.0	20
21	43.3	140.8	103.0	70.9	67.4	54.6	71.6	66.0	67.2	21
22	87.0	260.6	190.0	92.9	112.1	83.8	136.1	101.9	109.0	22
23	74.6	232.4	154.0	85.1	105.9	147.4	113.5	108.0	109.2	23
24	81.5	154.9	155.1	68.8	106.8	121.9	114.4	99.5	102.6	24
25	75.1	119.7	130.1	80.0	79.4	106.5	99.2	84.5	87.6	25
26	78.6	42.3	79.5	82.2	65.2	76.1	77.3	71.7	72.9	26
27	75.8	7.0	36.3	89.1	57.6	71.5	56.9	68.5	66.0	27
28	83.0	21.1	24.2	102.0	68.5	61.1	56.6	76.0	72.0	28
29	93.9		24.9	89.9	77.7	80.5	62.0	81.4	77.4	29
30	91.0		18.4	73.4	85.0	67.7	57.8	78.8	74.4	30
31	53.9		15.6	55.8	47.0	33.9	36.2	46.9	44.7	31
32	33.7		8.2	5.8	33.2	18.2	22.0	23.2	23.0	32
33	14.7		4.6	5.8	15.7	15.8	10.0	13.1	12.4	33
34	16.4		0.9	6.4	9.8	11.8	9.4	9.3	9.3	34
35	12.1		1.6	3.6	10.3	9.6	7.3	8.4	8.2	35
36	3.8			0.6	4.7	6.1	2.1	3.9	3.5	36
37	13.4			2.8	5.6	2.4	7.4	4.2	4.9	37
38	11.3			3.3	6.0	4.8	6.3	5.1	5.3	38
39	9.7			0.3	3.8	0.5	5.4	2.3	2.9	39
40	5.2			1.5	3.3	0.5	2.9	2.3	2.4	40
41	4.2				1.3		2.4	0.7	1.1	41
42	1.9				0.6		1.0	0.3	0.5	42
43	0.5						0.3		0.1	43
44	0.5						0.3		0.1	44
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	6	1	5	3	16	5	12	24	36	
SAMPLING WEIGHT(kg)	368	27	284	272	1238	370	679	1879	2558	
No. F.MEASURED	968	142	1362	875	4090	1276	2472	6241	8713	
MEAN LENGTH(cm)	27.6	23.5	24.4	26.2	26.7	26.4	26.1	26.5	26.4	
MEAN WEIGHT (g)	329	192	219	276	296	282	279	288	286	
DEPTH RANGE (m)	95/461	365/444	139/337	100/370	68/511	164/339	95/461	68/511	68/511	

TABLE XVII: AMERICAN PLAICE, DIV. 3L, 2001: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	1st Q.	2nd Q.	YEAR	LENGTH GROUP
22		2.8	0.2		2.1	0.1	1.0	22
24		5.1	2.6		3.9	2.4	3.1	24
26		10.4	3.9	5.6	8.0	4.1	5.8	26
28	5.7	32.5	15.5	20.4	26.4	16.0	20.6	28
30	20.7	65.9	53.9	54.1	55.5	53.9	54.6	30
32	63.7	101.2	81.8	94.3	92.6	83.1	87.3	32
34	74.1	95.9	127.7	109.1	90.9	125.8	110.3	34
36	122.8	104.5	154.1	136.5	108.7	152.3	132.9	36
38	134.6	121.3	156.6	130.2	124.4	153.9	140.7	38
40	157.8	123.1	141.8	122.4	131.0	139.8	135.9	40
42	126.0	126.0	103.6	98.7	126.0	103.1	113.3	42
44	145.4	68.0	70.8	72.3	85.8	70.9	77.5	44
46	66.9	64.6	43.3	42.8	65.2	43.3	53.0	46
48	35.7	34.1	22.1	41.0	34.5	24.0	28.7	48
50	31.2	18.8	7.1	23.7	21.6	8.8	14.5	50
52	7.6	18.6	9.4	20.9	16.1	10.6	13.0	52
54	2.2	3.8	4.0	11.1	3.5	4.8	4.2	54
56	5.6	2.7	0.5	9.5	3.3	1.4	2.3	56
58		0.4	0.9	1.3	0.3	1.0	0.7	58
60				3.4		0.4	0.2	60
62		0.3		1.3	0.2	0.1	0.2	62
64				1.3		0.1	0.1	64
TOTAL	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	15	14	6	18	20	38	
SAMPLING WEIGHT(kg)	335	1198	1521	443	1533	1964	3497	
No. F.MEASURED	456	1779	2641	683	2235	3324	5559	
MEAN LENGTH(cm)	41.1	39.3	39.0	39.9	39.7	39.1	39.4	
MEAN WEIGHT (g)	702	633	605	666	649	611	628	
DEPTH RANGE (m)	848/1190	853/1204	789/1001	715/1186	848/1204	715/1186	715/1204	

TABLE XVIII - A: AMERICAN PLAICE, DIV. 3M, 2001: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUL	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
22			0.6	0.9	4.9				0.7	0.3	0.4	22
24		0.5	0.9	1.1		2.1		0.4	1.0	1.7	1.1	24
26		1.9	2.8	4.3		0.5	3.8	1.5	3.3	0.8	2.3	26
28	1.6	14.5	10.5	13.0	14.8	20.3	11.5	12.1	11.4	19.1	13.6	28
30	19.2	36.6	43.5	42.1	63.5	54.7	59.9	33.3	43.0	55.7	44.5	30
32	49.8	64.7	80.6	83.8	67.8	92.0	108.5	61.9	81.8	92.4	80.8	32
34	74.3	68.9	107.3	96.9	137.1	117.3	103.5	69.9	103.6	117.0	100.7	34
36	139.5	115.9	142.8	126.2	112.7	137.0	111.4	120.3	136.8	133.1	132.7	36
38	185.9	94.7	163.0	119.2	181.4	141.3	132.3	111.8	147.2	142.5	139.2	38
40	187.9	111.7	124.6	136.9	156.2	129.6	136.9	126.0	129.0	131.7	129.2	40
42	125.5	84.8	101.6	105.1	78.2	98.0	93.9	92.4	102.8	96.5	99.1	42
44	82.2	78.1	82.7	95.6	53.3	66.3	99.5	78.8	87.3	68.9	80.8	44
46	61.6	102.8	55.2	60.5	18.6	53.5	83.8	95.1	57.1	54.7	63.8	46
48	12.9	102.1	42.6	52.2	18.6	62.5	24.5	85.3	46.1	56.3	56.4	48
50	4.9	57.9	21.2	35.2	18.6	21.2	30.6	47.9	26.2	22.0	29.3	50
52	40.1	50.4	10.4	13.9	13.9	1.7		48.5	11.7	2.2	16.2	52
54	9.7	9.8	8.2	8.3	18.6	0.2		9.8	8.3	1.2	6.7	54
56	4.9	4.5	1.5	2.6	18.6			4.6	1.9	1.0	2.2	56
58		0.4		0.6		1.8		0.3	0.2	1.5	0.6	58
60				0.5	4.6				0.2	0.2	0.2	60
62				1.1	13.9				0.4	0.7	0.4	62
64					4.6					0.2	0.1	64
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	4	10	15	10	2	8	2	14	25	12	51	
SAMPLING WEIGHT(kg)	170	885	1408	1376	150	700	202	1055	2784	1052	4891	
No. F.MEASURED	256	1166	2170	2003	206	1089	295	1422	4173	1590	7185	
MEAN LENGTH(cm)	40.8	42.2	39.9	40.4	40.0	39.5	39.6	41.9	40.1	39.5	40.3	
MEAN WEIGHT (g)	682	777	640	675	674	620	626	759	653	623	665	
DEPTH RANGE (m)	852/989	849/1101	851/1106	828/1068	162/210	293/1111	364/439	849/1101	828/1106	162/1111	162/1111	

TABLE XVIII - B: AMERICAN PLAICE, DIV.3M, 2001: age composition (‰), mean length (cm) and mean weight (Kg) at age of the trawl catches.

AGE	FEB. AGE COMP.	FEB. MEAN LENGTH	FEB. MEAN WEIGHT	MAR. AGE COMP.	MAR. MEAN LENGTH	MAR. MEAN WEIGHT	APR. AGE COMP.	APR. MEAN LENGTH	APR. MEAN WEIGHT	MAY AGE COMP.	MAY MEAN LENGTH	MAY MEAN WEIGHT	JUL. AGE COMP.	JUL. MEAN LENGTH	JUL. MEAN WEIGHT	AGE
2							0.6	23.0	0.103	0.4	23.0	0.103	2.5	23.0	0.103	2
3	13.3	32.4	0.309	30.7	31.6	0.289	36.6	31.8	0.295	39.9	31.5	0.288	30.6	30.8	0.271	3
4	23.4	32.9	0.327	42.7	32.1	0.304	76.2	33.0	0.334	58.3	32.3	0.311	121.7	33.1	0.334	4
5	90.6	35.9	0.433	81.9	35.0	0.403	114.3	35.6	0.421	83.4	34.9	0.400	110.4	35.7	0.426	5
6	117.2	38.3	0.531	57.0	37.5	0.501	102.4	38.0	0.520	70.9	37.5	0.498	115.9	38.1	0.525	6
7	70.6	38.1	0.522	40.5	37.3	0.491	62.5	37.6	0.504	49.6	37.2	0.487	69.5	37.9	0.516	7
8	47.0	39.5	0.607	47.7	39.8	0.627	45.9	39.2	0.596	55.1	39.3	0.601	39.8	38.7	0.572	8
9	114.9	41.2	0.679	95.5	41.4	0.701	99.5	41.0	0.676	111.9	40.9	0.671	81.5	40.5	0.650	9
10	305.1	41.6	0.697	243.5	42.8	0.775	256.7	41.8	0.712	269.2	41.8	0.716	216.6	41.3	0.683	10
11	72.9	41.7	0.722	94.8	43.6	0.835	69.6	42.2	0.753	87.2	42.2	0.752	57.4	41.2	0.697	11
12	75.3	43.8	0.851	122.0	46.0	0.985	79.7	44.2	0.872	96.9	44.3	0.880	56.1	43.1	0.810	12
13	23.0	48.2	1.136	54.8	48.9	1.172	23.2	48.2	1.119	30.3	48.1	1.119	17.2	47.8	1.109	13
14	20.4	51.6	1.394	41.5	50.8	1.322	15.4	50.4	1.294	20.6	50.5	1.308	20.9	53.6	1.600	14
15	10.7	52.9	1.506	20.2	52.2	1.434	8.3	52.1	1.444	11.3	52.0	1.429	12.7	53.0	1.514	15
16	3.2	53.6	1.548	5.8	52.6	1.460	2.3	53.0	1.505	3.4	53.8	1.591	8.1	59.0	2.159	16
17	2.2	52.7	1.471	5.9	51.8	1.391	1.8	51.6	1.369	2.8	51.5	1.362	1.8	51.7	1.385	17
18	3.1	53.6	1.555	4.7	53.0	1.495	1.8	53.5	1.548	2.3	53.2	1.516	3.1	54.1	1.599	18
19	7.0	55.7	1.764	9.4	54.5	1.650	2.9	54.5	1.648	5.4	55.4	1.749	24.6	57.8	1.994	19
20	0.1	51.0	1.321	1.2	51.0	1.321	0.4	51.0	1.321	0.7	51.0	1.321	0.4	51.0	1.321	20
21													4.6	65.0	2.877	21
22																22
23										0.4	63.0	2.602	4.6	63.0	2.602	23
TOTAL	1000			1000			1000			1000			1000			

AGE	AUG. AGE COMP.	AUG. MEAN LENGTH	AUG. MEAN WEIGHT	SEP. AGE COMP.	SEP. MEAN LENGTH	SEP. MEAN WEIGHT	1st Q. AGE COMP.	1st Q. MEAN LENGTH	1st Q. MEAN WEIGHT	2nd Q. AGE COMP.	2nd Q. MEAN LENGTH	2nd Q. MEAN WEIGHT	3rd Q. AGE COMP.	3rd Q. MEAN LENGTH	3rd Q. MEAN WEIGHT	YEAR AGE COMP.	YEAR MEAN LENGTH	YEAR MEAN WEIGHT	AGE
2													0.1	23.0	0.103	0.3	23.0	0.103	2
3	38.8	31.5	0.285	57.0	32.1	0.303	27.4	31.7	0.291	37.8	31.7	0.292	40.2	31.5	0.287	36.4	31.7	0.290	3
4	84.4	32.9	0.329	70.7	32.0	0.300	39.1	32.2	0.306	69.8	32.8	0.327	85.0	32.8	0.327	68.0	32.7	0.325	4
5	130.0	35.1	0.407	66.6	34.3	0.377	83.6	35.2	0.409	103.2	35.4	0.415	122.5	35.1	0.406	104.6	35.3	0.411	5
6	92.6	37.7	0.507	88.5	37.6	0.504	68.3	37.8	0.511	91.1	37.9	0.514	93.4	37.7	0.508	87.3	37.8	0.512	6
7	59.5	37.3	0.492	58.4	37.2	0.489	46.2	37.5	0.500	57.9	37.5	0.499	59.9	37.3	0.493	56.2	37.4	0.497	7
8	45.2	38.6	0.570	57.2	39.3	0.600	47.6	39.8	0.623	49.2	39.2	0.598	46.1	38.7	0.574	48.0	39.2	0.597	8
9	103.2	40.9	0.673	104.6	40.6	0.657	99.1	41.3	0.697	104.0	41.0	0.674	102.1	40.9	0.670	102.5	41.0	0.677	9
10	249.5	41.8	0.717	270.9	41.6	0.703	255.1	42.5	0.758	261.2	41.8	0.714	249.9	41.8	0.714	257.0	41.9	0.722	10
11	70.0	42.1	0.753	86.7	42.0	0.742	90.7	43.3	0.818	75.9	42.2	0.753	71.0	42.1	0.749	77.4	42.4	0.766	11
12	80.0	44.2	0.875	93.2	43.8	0.846	113.2	45.8	0.968	85.9	44.3	0.875	80.0	44.1	0.869	89.6	44.6	0.896	12
13	24.7	47.7	1.083	24.8	47.4	1.062	48.9	48.9	1.168	25.8	48.2	1.119	24.3	47.7	1.082	29.8	48.3	1.126	13
14	12.3	48.8	1.157	10.9	48.4	1.134	37.5	50.9	1.329	17.3	50.5	1.300	12.6	49.2	1.194	19.9	50.4	1.293	14
15	4.8	51.5	1.413	5.0	49.7	1.235	18.4	52.2	1.441	9.4	52.1	1.437	5.2	51.5	1.409	10.0	52.1	1.435	15
16	1.0	51.3	1.346	1.2	51.0	1.321	5.3	52.7	1.470	2.7	53.4	1.544	1.4	53.7	1.600	2.8	53.2	1.525	16
17	1.4	51.1	1.332	1.9	51.0	1.321	5.2	51.9	1.398	2.2	51.5	1.366	1.5	51.1	1.334	2.6	51.6	1.374	17
18	0.5	51.5	1.365	0.6	51.0	1.321	4.4	53.0	1.503	2.0	53.4	1.535	0.7	52.1	1.418	2.1	53.1	1.512	18
19	1.9	55.0	1.715	1.2	51.0	1.321	9.0	54.7	1.667	3.8	55.0	1.700	3.0	56.1	1.821	4.6	55.1	1.709	19
20	0.4	51.0	1.321	0.6	51.0	1.321	1.0	51.0	1.321	0.5	51.0	1.321	0.4	51.0	1.321	0.6	51.0	1.321	20
21													0.2	65.0	2.877	0.1	65.0	2.877	21
22																			22
23										0.1	63.0	2.602	0.2	63.0	2.602	0.1	63.0	2.602	23
TOTAL	1000			1000			1000			1000			1000			1000			TOTAL

TABLE XIX - A: AMERICAN PLAICE, DIV. 3N, 2001: length composition of the trawl catches.

LENGTH GROUP	MAR	MAY	JUL	AUG	SEP	NOV	DEC	1st Q.	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
16					1.8	7.6				1.5	5.5	3.3	16
18			2.7		13.1	8.6				11.2	6.2	8.6	18
20					35.5	23.0	2.8			29.5	17.5	23.1	20
22				5.4	34.4	32.3	7.0			28.8	25.4	26.4	22
24		3.3	5.5	5.4	31.4	30.5	13.0		3.3	27.0	25.8	25.7	24
26	9.0	2.3	5.5	16.1	39.5	27.9	21.4	9.0	2.3	34.3	26.1	29.6	26
28	28.7	8.0	19.1	10.8	37.0	36.9	32.4	28.7	8.0	33.5	35.7	33.8	28
30	72.5	22.4	35.5	37.6	44.9	34.8	80.8	72.5	22.4	43.4	47.3	44.7	30
32	110.2	57.8	86.0	102.2	81.8	66.6	140.6	110.2	57.8	83.4	86.7	84.3	32
34	94.9	96.3	114.8	86.0	87.5	78.5	174.3	94.9	96.3	90.6	104.5	97.2	34
36	108.3	134.7	120.9	155.9	124.7	64.4	118.1	108.3	134.7	126.0	79.0	104.6	36
38	114.4	115.0	123.7	118.3	76.9	79.7	86.2	114.4	115.0	84.5	81.4	84.0	38
40	166.8	106.9	119.4	96.8	114.5	65.6	34.6	166.8	106.9	114.1	57.2	87.9	40
42	132.6	122.3	111.0	107.5	92.4	66.6	80.2	132.6	122.3	95.4	70.3	84.7	42
44	81.5	109.6	87.1	91.4	61.2	63.7	88.7	81.5	109.6	65.8	70.5	69.2	44
46	30.0	71.0	58.6	96.8	59.5	61.2	41.2	30.0	71.0	61.5	55.8	59.0	46
48	25.6	71.5	42.4	37.6	29.4	45.8	31.8	25.6	71.5	31.4	42.0	37.3	48
50	10.5	34.3	36.5	5.4	20.8	51.8	6.0	10.5	34.3	21.7	39.4	30.1	50
52	9.0	13.5	10.9	10.8	6.3	53.6	5.0	9.0	13.5	7.1	40.4	22.5	52
54		13.1	9.4	5.4	3.4	37.0	9.6		13.1	4.2	29.6	16.1	54
56		11.0	5.5	5.4	1.8	28.1	8.6		11.0	2.5	22.8	12.0	56
58	6.1	2.1	5.5	5.4	1.8	15.0	6.8	6.1	2.1	2.4	12.8	7.2	58
60		1.5			0.2	11.7	5.4		1.5	0.2	10.0	4.7	60
62		2.9			0.1	4.5	5.4		2.9	0.1	4.7	2.3	62
64		0.5				2.1			0.5		1.6	0.7	64
66						1.5					1.1	0.5	66
68													68
70						1.0					0.7	0.3	70
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	6	3	1	9	7	2	2	6	13	9	30	
SAMPLING WEIGHT(kg)	115	996	506	122	1662	1567	365	115	996	2290	1932	5333	
No. F.MEASURED	190	1357	716	186	2607	1586	634	190	1357	3509	2220	7276	
MEAN LENGTH(cm)	39.0	41.5	40.2	39.8	37.0	40.5	38.1	39.0	41.5	37.5	39.8	38.7	
MEAN WEIGHT (g)	609	739	674	654	556	771	592	609	739	575	723	647	
DEPTH RANGE (m)	1027/1238	57/1076	50/476	126/759	58/117	45/199	63/94	1027/1238	57/1076	50/759	45/199	45/1238	

TABLE XIX - B: AMERICAN PLAICE, DIV. 3N, 2001: length composition of the trawl catches (300 mm).

LENGTH GROUP	JUL	NOV	DEC	3rd Q.	4th Q.	YEAR	LENGTH GROUP
22		1.4	2.7		1.8	1.6	22
24		4.1	2.7		3.7	3.3	24
26		4.1	30.1		12.3	11.3	26
28		10.9	21.9		14.4	13.1	28
30	24.8	21.7	68.3	24.8	36.5	35.5	30
32	54.5	51.2	60.1	54.5	54.0	54.0	32
34	44.6	123.7	123.0	44.6	123.4	116.8	34
36	158.4	114.8	65.6	158.4	99.2	104.2	36
38	99.0	86.0	106.6	99.0	92.5	93.1	38
40	113.9	48.4	24.6	113.9	40.9	47.0	40
42	104.0	40.1	73.8	104.0	50.7	55.2	42
44	99.0	52.4	155.7	99.0	85.1	86.3	44
46	64.4	48.2	73.8	64.4	56.3	57.0	46
48	198.0	115.1	84.7	198.0	105.5	113.3	48
50	39.6	91.4	30.1	39.6	72.0	69.3	50
52		72.6	19.1		55.7	51.0	52
54		59.9	13.7		45.3	41.5	54
56		31.0	16.4		26.4	24.2	56
58		11.6	13.7		12.2	11.2	58
60		8.1	2.7		6.4	5.8	60
62		2.4	2.7		2.5	2.3	62
64		1.0	8.2		3.3	3.0	64
TOTAL	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	3	1	1	4	5	
SAMPLING WEIGHT(kg)	162	856	282	162	1138	1300	
No. F.MEASURED	202	906	366	202	1272	1474	
MEAN LENGTH(cm)	42.2	43.8	41.3	42.2	43.0	42.9	
MEAN WEIGHT (g)	766	903	760	766	858	850	
DEPTH RANGE (m)	60/64	52/92	65/68	60/64	52/92	52/92	

TABLE XX: AMERICAN PLAICE, DIV. 3O, 2001: length composition of the trawl catches.

LENGTH GROUP	MAY	JUL	SEP	OCT	NOV	DEC	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
16	3.1						3.1			0.1	16
18	6.3				2.9		6.3		1.5	1.6	18
20	3.1				15.3	2.3	3.1		9.2	8.5	20
22	6.3	4.3			16.2	5.8	6.3	2.1	11.2	10.6	22
24		8.5	0.7		27.0	16.8		4.6	21.8	20.3	24
26	9.4	29.9	1.4		41.2	48.9	9.4	15.7	43.7	41.2	26
28	15.6	59.8	12.2		68.9	47.2	15.6	36.1	57.7	55.3	28
30	75.0	51.3	22.6	16.0	101.4	98.2	75.0	37.0	98.1	94.2	30
32	112.5	68.4	61.4	52.0	111.5	103.6	112.5	64.9	106.7	104.7	32
34	181.3	123.9	88.0	156.0	115.5	150.1	181.3	106.0	131.7	131.9	34
36	106.3	98.3	106.6	112.0	95.8	130.6	106.3	102.4	111.6	110.9	36
38	75.0	196.6	75.2	76.0	75.8	90.6	75.0	136.0	82.3	84.9	38
40	128.1	102.6	147.7	52.0	65.8	74.0	128.1	125.1	69.1	73.8	40
42	196.9	106.8	103.6	80.0	50.0	49.7	196.9	105.2	50.6	57.9	42
44	62.5	51.3	163.8	160.0	88.0	73.8	62.5	107.4	83.3	83.9	44
46		29.9	131.1	80.0	66.5	40.7		80.4	55.4	55.0	46
48	12.5	12.8	46.8	64.0	25.3	16.4	12.5	29.8	22.2	22.3	48
50	6.3	12.8	28.7	80.0	12.3	12.8	6.3	20.7	14.1	14.2	50
52		4.3	3.0	32.0	6.5	9.0		3.6	8.2	7.7	52
54		8.5	2.2	16.0	3.6	12.2		5.4	7.7	7.4	54
56		21.4	3.7	16.0	5.2	8.3		12.5	6.8	6.9	56
58		4.3	0.7		3.3	4.7		2.5	3.8	3.6	58
60		4.3	0.7	4.0	1.2	1.3		2.5	1.3	1.3	60
62				4.0	0.2	3.0			1.6	1.4	62
64					0.7				0.4	0.3	64
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	1	5	1	10	9	1	6	20	27	
SAMPLING WEIGHT(kg)	176	143	651	199	1256	1139	176	794	2594	3564	
No. F.MEASURED	320	234	918	250	2188	2034	320	1152	4472	5944	
MEAN LENGTH(cm)	37.8	38.6	41.5	42.5	36.9	37.4	37.8	40.0	37.2	37.4	
MEAN WEIGHT (g)	552	606	727	802	546	563	552	667	559	564	
DEPTH RANGE (m)	369/383	111/211	200/547	355/418	73/374	166/492	369/383	111/547	73/492	73/547	

TABLE XXI - A: YELLOWTAIL FLOUNDER, DIV. 3N, 2001: length composition of the trawl catches.

LENGTH GROUP	MAY	JUL	SEP	NOV	DEC	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
12	1.3					1.3			0.2	12
14	6.6		0.1	0.7	2.6	6.6	0.1	1.9	1.8	14
16	13.1		5.3	2.2	5.0	13.1	4.7	4.0	5.7	16
18	29.3		11.2	9.7	16.5	29.3	9.9	14.1	14.4	18
20	12.3	7.0	4.9	13.5	19.4	12.3	5.1	17.3	10.8	20
22	27.6	14.3	16.5	14.6	27.8	27.6	16.2	23.1	20.6	22
24	49.6	36.0	21.8	24.3	16.6	49.6	23.4	19.3	25.9	24
26	88.5	62.2	45.4	40.0	80.9	88.5	47.3	66.5	60.8	26
28	148.8	106.2	80.9	68.7	112.1	148.8	83.8	96.8	98.6	28
30	177.1	140.9	104.4	75.6	128.9	177.1	108.6	110.1	119.6	30
32	165.8	169.0	92.1	152.7	89.1	165.8	100.8	111.5	114.7	32
34	115.7	129.0	94.2	149.2	72.3	115.7	98.2	99.4	101.3	34
36	63.1	118.1	103.0	118.1	127.6	63.1	104.7	124.3	105.8	36
38	34.1	77.5	94.6	53.5	87.8	34.1	92.7	75.7	77.4	38
40	30.6	44.9	98.6	47.4	98.8	30.6	92.5	80.7	78.6	40
42	26.9	16.1	77.3	44.4	43.0	26.9	70.4	43.5	53.6	42
44	7.4	48.0	75.6	72.3	31.0	7.4	72.5	45.5	52.4	44
46	2.2	9.3	44.5	68.3	26.5	2.2	40.6	41.2	35.0	46
48		6.9	20.1	26.4	6.5		18.6	13.5	13.9	48
50		0.4	4.1	8.0	3.8		3.7	5.3	3.7	50
52		0.8	3.3	6.8	4.1		3.0	5.1	3.3	52
54		8.1	0.6	2.9			1.5	1.0	1.1	54
56		5.3	0.5	0.6			1.0	0.2	0.6	56
58			0.5				0.4		0.2	58
60			0.5				0.4		0.2	60
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	3	8	5	2	2	11	7	20	
SAMPLING WEIGHT(kg)	313	238	1205	569	285	313	1442	854	2610	
No. F.MEASURED	941	582	2278	1261	779	941	2860	2040	5841	
MEAN LENGTH(cm)	31.3	34.3	36.3	36.2	34.2	31.3	36.1	34.9	34.9	
MEAN WEIGHT (g)	586	805	998	993	821	586	976	882	881	
DEPTH RANGE (m)	56/57	50/405	58/117	45/199	63/94	56/57	50/405	45/199	45/405	

TABLE XXI - B: YELLOWTAIL FLOUNDER, DIV. 3N, 2001: length composition of the trawl catches (300 mm).

LENGTH GROUP	JUL	NOV	DEC	3rd Q.	4th Q.	YEAR	LENGTH GROUP
16	9.9			9.9		0.9	16
18	39.4	4.0	2.4	39.4	3.0	6.4	18
20	14.8	6.7	4.8	14.8	5.5	6.4	20
22	24.6	21.5	11.9	24.6	15.7	16.6	22
24	39.4	42.8	23.8	39.4	31.4	32.1	24
26	73.9	46.7	47.5	73.9	47.2	49.6	26
28	128.1	106.1	168.6	128.1	143.6	142.1	28
30	182.3	161.3	163.9	182.3	162.8	164.6	30
32	98.5	177.5	130.6	98.5	149.4	144.7	32
34	98.5	102.3	73.6	98.5	85.1	86.4	34
36	69.0	127.3	26.1	69.0	66.7	66.9	36
38	34.5	40.9	54.6	34.5	49.1	47.8	38
40	73.9	49.2	128.3	73.9	96.5	94.5	40
42	54.2	62.3	49.9	54.2	54.9	54.8	42
44	14.8	16.7	45.1	14.8	33.7	32.0	44
46	9.9	9.7	14.3	9.9	12.4	12.2	46
48	19.7	6.3	16.6	19.7	12.5	13.2	48
50		6.1	19.0		13.8	12.6	50
52	9.9	9.1	2.4	9.9	5.1	5.5	52
54		3.2	16.6		11.2	10.2	54
56		0.2			0.1	0.1	56
58	4.9			4.9		0.5	58
TOTAL	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	3	1	1	4	5	
SAMPLING WEIGHT(kg)	76	256	199	76	455	531	
No. F.MEASURED	203	638	421	203	1059	1262	
MEAN LENGTH(cm)	33.0	34.1	35.2	33.0	34.7	34.6	
MEAN WEIGHT (g)	755	790	914	755	864	854	
DEPTH RANGE (m)	60/64	52/92	65/68	60/64	52/92	52/92	

TABLE XXII: YELLOWTAIL FLOUNDER, DIV. 3O, 2001: length composition of the trawl catches.

LENGTH GROUP	MAY	SEP	NOV	DEC	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
20	4.5			8.7	4.5		7.5	5.4	20
22	18.1		5.6	13.1	18.1		12.0	14.6	22
24	31.7		28.2	52.4	31.7		49.0	36.5	24
26	58.8		28.2	39.3	58.8		37.7	46.8	26
28	117.6		124.3	56.8	117.6		66.4	89.9	28
30	117.6	38.5	169.5	144.1	117.6	38.5	147.7	124.5	30
32	153.8	64.1	180.8	196.5	153.8	64.1	194.3	164.1	32
34	76.9	102.6	84.7	196.5	76.9	102.6	180.6	119.5	34
36	122.2	134.6	96.0	100.4	122.2	134.6	99.8	114.1	36
38	113.1	166.7	45.2	65.5	113.1	166.7	62.6	96.6	38
40	104.1	185.9	45.2	21.8	104.1	185.9	25.2	78.1	40
42	63.3	160.3	107.3	39.3	63.3	160.3	49.0	63.8	42
44	18.1	102.6	28.2	17.5	18.1	102.6	19.0	23.8	44
46		19.2	5.6	13.1		19.2	12.0	6.0	46
48		25.6	5.6	8.7		25.6	8.3	4.9	48
50			16.9	17.5			17.4	6.9	50
52			16.9	8.7			9.9	3.9	52
54			11.3				1.6	0.6	54
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	1	1	1	1	1	2	4	
SAMPLING WEIGHT(kg)	83	99	73	86	83	99	159	342	
No. F.MEASURED	221	156	177	229	221	156	406	783	
MEAN LENGTH(cm)	34.5	39.7	35.4	34.4	34.5	39.7	34.5	34.8	
MEAN WEIGHT (g)	796	1227	912	807	796	1227	822	834	
DEPTH RANGE (m)	369/383	438/547	79/107	226/351	369/383	438/547	79/351	79/547	

TABLE XXIII: GREENLAND HALIBUT, DIV. 3L, 2001: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUL	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
22			0.2						0.1		0.1	22
24			0.2		0.5				0.2	0.2	0.1	24
26			0.6						0.5		0.2	26
28			1.8	1.3	0.6				1.7	0.2	0.7	28
30	0.5	0.2	7.4	6.4	0.9		2.1	0.3	7.2	0.8	3.2	30
32	1.5	2.8	13.9	13.5	5.3	0.4	2.3	2.5	13.8	2.7	7.0	32
34	9.8	11.5	30.7	43.9	14.7	9.9	14.3	11.0	33.6	12.6	20.4	34
36	30.0	32.0	82.5	70.5	30.8	25.8	31.3	31.5	79.9	28.8	49.7	36
38	72.6	85.9	126.3	106.2	55.9	53.6	62.0	82.4	121.9	56.1	89.5	38
40	139.7	138.5	179.6	137.9	115.2	111.7	132.2	138.8	170.5	117.0	144.3	40
42	165.1	169.0	184.5	154.3	178.1	173.4	176.9	168.0	177.9	175.9	174.5	42
44	173.6	177.7	126.5	136.7	160.0	168.7	164.4	176.6	128.7	164.5	153.7	44
46	173.7	134.6	98.4	136.9	147.7	154.9	138.2	145.0	106.7	148.9	131.1	46
48	91.1	89.5	65.1	75.5	116.9	102.4	121.8	89.9	67.3	111.8	88.1	48
50	48.1	58.2	34.5	42.0	65.2	62.9	53.1	55.5	36.2	61.9	50.0	50
52	25.3	23.0	13.8	18.8	46.8	37.2	38.8	23.6	14.9	41.2	25.8	52
54	11.4	15.9	9.6	16.2	13.0	17.1	22.8	14.7	11.1	16.6	13.9	54
56	15.8	12.8	8.3	12.8	8.8	14.7	16.5	13.6	9.3	12.8	11.6	56
58	10.6	13.0	6.8	13.8	10.0	20.0	5.3	12.3	8.3	13.3	11.1	58
60	7.5	7.6	3.0	6.6	9.5	13.0	4.5	7.6	3.8	10.0	6.9	60
62	5.7	7.3	1.9	1.0	5.3	8.5	5.1	6.9	1.7	6.6	4.7	62
64	3.1	3.6	1.7	3.0	3.9	7.1	2.8	3.5	2.0	5.0	3.4	64
66	5.8	3.6	0.7	2.1	3.0	4.6	2.0	4.2	1.0	3.5	2.7	66
68	2.8	3.0	1.2	0.2	2.2	3.2	1.0	3.0	1.0	2.4	2.0	68
70	1.0	3.8	0.3	0.1	1.9	3.0	0.5	3.1	0.2	2.1	1.6	70
72	1.1	1.0	0.2	0.1	0.9	2.9	0.2	1.1	0.1	1.6	0.9	72
74	0.7	1.8	0.3	0.1	0.5	1.3	0.8	1.5	0.3	0.9	0.8	74
76	1.0	0.7	0.1		1.7	0.5		0.7	0.1	0.9	0.5	76
78	0.5	1.2				0.9	0.2	1.0		0.4	0.4	78
80	1.1	0.6			0.3	0.8	0.2	0.7		0.5	0.4	80
82	0.5	0.4				0.4	0.6	0.4		0.3	0.2	82
84		0.5			0.3	0.6		0.3		0.4	0.2	84
86		0.1				0.4	0.2	0.1		0.2	0.1	86
88		0.3						0.2			0.1	88
90	0.5					0.2		0.1		0.1	0.1	90
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	9	20	15	8	14	17	7	29	23	38	90	
SAMPLING WEIGHT(kg)	2120	4905	3752	2268	3350	4771	1822	7025	6019	9943	22987	
No. F.MEASURED	2321	5270	5108	2964	3697	4849	2061	7591	8072	10607	26270	
MEAN LENGTH(cm)	45.6	45.6	43.1	44.0	45.9	46.6	45.6	45.6	43.3	46.1	44.9	
MEAN WEIGHT (g)	836	842	683	734	845	906	820	840	694	865	791	
DEPTH RANGE (m)	848/1234	853/1204	814/1141	715/1186	736/1098	493/1159	836/934	848/1234	715/1186	493/1159	493/1234	

TABLE XXIV: GREENLAND HALIBUT, DIV. 3M, 2001: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUL	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
26				0.5					0.2		0.1	26
28				2.4					0.8		0.4	28
30	0.7	0.5	2.3	4.3				0.6	2.9		1.7	30
32	0.7	1.4	6.3	13.0	3.6	4.7	2.2	1.2	8.4	4.0	5.5	32
34	7.4	6.3	17.3	39.0	11.4	9.3	4.9	6.7	24.1	9.9	16.6	34
36	23.1	32.7	47.9	70.6	22.1	36.3	7.8	29.5	55.1	27.9	43.1	36
38	57.0	70.4	88.4	130.6	50.6	93.7	45.2	65.9	101.7	70.9	86.1	38
40	131.3	137.1	162.2	172.1	98.8	177.0	101.6	135.1	165.3	136.5	151.7	40
42	188.3	172.3	181.4	157.5	158.4	208.0	146.0	177.6	173.8	181.3	176.2	42
44	189.6	147.4	155.7	120.3	164.7	165.3	165.3	161.5	144.5	165.0	152.9	44
46	154.6	152.0	123.9	89.7	138.4	147.9	163.8	152.9	113.1	144.8	130.1	46
48	118.4	111.3	88.6	60.0	131.5	76.1	127.3	113.7	79.6	104.6	93.8	48
50	58.4	58.0	50.6	44.4	59.4	40.8	76.9	58.1	48.6	51.8	52.0	50
52	27.9	43.9	25.0	28.9	41.0	17.7	36.1	38.5	26.3	29.4	30.4	52
54	17.0	19.8	15.4	18.7	28.9	1.5	23.8	18.8	16.5	15.4	17.0	54
56	11.3	16.4	13.0	10.6	13.6	6.4	17.5	14.7	12.3	10.4	12.7	56
58	6.8	10.4	11.2	16.1	19.7	2.7	19.3	9.2	12.8	11.5	11.5	58
60	4.1	6.9	3.2	8.8	13.3	3.2	9.6	6.0	5.0	8.2	5.8	60
62	2.4	6.0	2.7	5.7	4.9	1.4	8.5	4.8	3.6	3.5	3.9	62
64	0.5	2.6	1.1	1.4	6.1	2.0	8.2	1.9	1.2	4.3	1.9	64
66		1.3	2.0	1.7	8.8			0.9	1.9	4.0	1.9	66
68			0.6	1.0	4.8	1.4	12.0		0.7	3.7	1.0	68
70		0.9	0.7	1.0	2.6	0.7	6.0	0.6	0.8	1.9	0.9	70
72		0.7	0.2	0.3	6.1	1.4	3.0	0.4	0.2	3.6	0.8	72
74		0.7	0.1		0.4	1.4	6.0	0.5	0.1	1.3	0.4	74
76		0.3		0.9	2.9		3.0	0.2	0.3	1.5	0.5	76
78	0.6	0.3		0.3	1.9			0.4	0.1	0.8	0.3	78
80				0.3	2.3		3.0		0.1	1.3	0.3	80
82					1.4					0.6	0.1	82
84		0.3			0.7	0.7		0.2		0.7	0.2	84
86		0.3			1.4	0.7		0.2		1.0	0.2	86
88												88
90							3.0			0.2	0.04	90
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	6	13	15	10	7	8	4	19	25	19	63	
SAMPLING WEIGHT(kg)	1370	2942	4059	2812	1474	1689	787	4311	6872	3950	15133	
No. F.MEASURED	1618	3255	4978	3478	1473	2201	784	4873	8456	4458	17787	
MEAN LENGTH(cm)	45.4	45.7	44.6	43.9	47.2	44.3	47.7	45.6	44.4	45.9	45.0	
MEAN WEIGHT (g)	794	829	759	738	965	741	1000	817	753	860	789	
DEPTH RANGE (m)	841/1175	594/1420	851/1106	828/1086	270/1121	293/1133	364/1071	594/1420	828/1106	270/1133	270/1420	

TABLE XXV: GREENLAND HALIBUT, DIV. 3N, 2001: length composition of the trawl catches.

LENGTH GROUP	MAR	MAY	JUL	AUG	SEP	NOV	DEC	1st Q.	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
26			2.5							1.7		0.3	26
28													28
30	4.1							4.1				0.5	30
32	8.2	0.5	6.0		3.7	2.5	5.1	8.2	0.5	4.2	2.8	2.6	32
34	16.5	6.6	17.7	2.3	25.7	7.5	35.6	16.5	6.6	14.0	11.4	10.3	34
36	57.5	24.7	36.9	18.6	66.2	33.4		57.5	24.7	33.6	28.8	31.1	36
38	86.8	49.9	66.4	65.3	169.1	98.3	91.6	86.8	49.9	71.9	97.4	71.1	38
40	146.7	105.5	109.9	153.9	231.6	151.4	157.8	146.7	105.5	128.7	152.2	127.2	40
42	192.2	157.3	137.5	172.5	261.0	200.7	203.6	192.2	157.3	154.0	201.1	173.2	42
44	133.1	175.9	115.8	186.8	125.0	180.1	178.1	133.1	175.9	135.6	179.9	165.6	44
46	112.6	170.6	106.7	176.8	77.2	128.1	142.5	112.6	170.6	124.0	130.1	144.9	46
48	68.9	93.4	82.0	103.7	29.4	102.2	86.5	68.9	93.4	84.9	100.1	91.1	48
50	41.7	65.9	71.8	84.5	11.0	45.5	22.9	41.7	65.9	71.8	42.4	57.4	50
52	29.4	38.8	46.4	35.5		25.7	35.6	29.4	38.8	40.8	27.0	34.7	52
54	12.6	27.1	37.0			5.4	20.4	12.6	27.1	24.9	7.4	19.5	54
56	14.7	15.4	23.6			4.5	5.1	14.7	15.4	15.9	4.6	12.3	56
58	10.5	19.2	20.2			4.1	15.3	10.5	19.2	13.6	5.7	13.5	58
60	8.4	11.7	11.1			3.4		8.4	11.7	7.5	3.0	8.2	60
62	8.4	13.5	20.5			1.8		8.4	13.5	13.8	1.6	9.6	62
64	6.3	6.1	14.4			3.0		6.3	6.1	9.7	2.6	5.7	64
66	6.3	4.3	4.2			0.6		6.3	4.3	2.8	0.6	3.3	66
68	4.2	3.9	15.2					4.2	3.9	10.2		3.8	68
70	4.2	2.8	4.3			0.8		4.2	2.8	2.9	0.7	2.4	70
72	8.4	2.4	13.7					8.4	2.4	9.2		3.5	72
74	6.2	0.8	8.5					6.2	0.8	5.7		2.0	74
76	2.1	0.8	5.2			0.8		2.1	0.8	3.5	0.7	1.4	76
78	2.0	1.7	5.2					2.0	1.7	3.5		1.5	78
80	4.1	0.8	5.2					4.1	0.8	3.5		1.4	80
82	2.1	0.1	0.9					2.1	0.1	0.6		0.4	82
84			2.5							1.7		0.3	84
86	2.0		3.4					2.0		2.3		0.6	86
88													88
90			2.7							1.8		0.3	90
92			2.5							1.7		0.3	92
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	7	4	2	1	9	1	2	7	7	10	26	
SAMPLING WEIGHT(kg)	491	2495	902	474	175	1754	298	491	2495	1551	2053	6590	
No. F.MEASURED	482	2323	701	597	272	2104	393	482	2323	1570	2497	6872	
MEAN LENGTH(cm)	45.8	46.9	48.7	45.0	42.0	44.6	44.5	45.8	46.9	47.3	44.5	46.2	
MEAN WEIGHT (g)	902	918	1156	764	604	749	747	902	918	1018	749	884	
DEPTH RANGE (m)	1027/1238	849/1252	626/1153	889/1083	511/603	444/1300	1064/1102	1027/1238	849/1252	511/1153	444/1300	444/1300	

TABLE XXVI: GREENLAND HALIBUT, DIV. 3O, 2001: length composition of the trawl catches.

LENGTH GROUP	OCT	NOV	4th Q. =YEAR	LENGTH GROUP
32	7.0	17.9	14.9	32
34		35.7	26.1	34
36	7.0	80.4	60.5	36
38	63.4	89.3	82.3	38
40	98.6	232.1	196.0	40
42	246.5	285.7	275.1	42
44	176.1	80.4	106.2	44
46	183.1	107.1	127.7	46
48	176.1	44.6	80.2	48
50	28.2	26.8	27.2	50
52	14.1		3.8	52
TOTAL	1000	1000	1000	
No. SAMPLES	1	1	2	
SAMPLING WEIGHT(kg)	112	74	187	
No. F.MEASURED	142	112	254	
MEAN LENGTH(cm)	44.9	42.3	43.0	
MEAN WEIGHT (g)	755	622	658	
DEPTH RANGE (m)	355/418	451/486	355/486	

TABLE XXVII: ROUGHHEAD GRENADIER, DIV. 3L, 2001: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUL	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
6	0.4							0.1			0.03	6
7	3.0	4.7	1.5	1.0	3.2	1.2	2.8	4.1	1.2	2.0	2.3	7
8	34.8	18.3	13.0	12.2	11.7	8.1	13.1	24.0	12.7	9.9	13.8	8
9	88.8	68.9	74.3	53.3	72.3	57.8	71.2	75.7	65.1	63.7	66.8	9
10	184.1	170.7	195.3	172.4	166.2	166.9	156.6	175.3	185.3	164.9	171.4	10
11	193.4	162.6	185.4	139.5	218.8	179.9	198.7	173.2	165.3	192.7	182.7	11
12	181.5	172.2	200.3	188.7	180.7	175.2	143.3	175.4	195.2	170.9	176.7	12
13	107.1	149.3	154.7	172.1	128.3	161.1	134.6	134.8	162.3	148.4	147.9	13
14	68.3	103.4	103.8	135.3	79.0	111.6	88.1	91.3	117.6	99.5	101.1	14
15	47.4	50.8	26.9	62.9	53.1	48.9	60.1	49.6	42.7	51.9	49.6	15
16	19.1	30.3	26.6	20.5	25.7	28.3	34.7	26.5	23.9	28.8	27.3	16
17	24.4	16.4	5.3	14.4	11.5	11.6	17.8	19.1	9.3	12.7	13.6	17
18	12.3	9.8	3.6	7.7	11.2	6.6	7.2	10.7	5.4	7.8	8.0	18
19	9.6	6.8	0.8	5.8	9.0	3.0	8.0	7.8	3.0	5.3	5.5	19
20	3.3	7.6	2.0	2.3	6.0	2.9	3.6	6.1	2.1	3.8	4.0	20
21	3.8	6.5	2.8	2.5	4.6	4.0	3.0	5.5	2.7	4.0	4.1	21
22	4.7	5.9	1.3	3.5	5.7	5.6	7.7	5.5	2.3	6.0	5.2	22
23	4.2	5.8	0.8	3.5	5.3	6.4	11.0	5.3	2.0	7.0	5.6	23
24	3.5	2.6	0.2	1.3	1.9	7.3	13.4	2.9	0.7	7.1	4.8	24
25	1.7	1.3		0.2	1.0	2.9	6.5	1.4	0.1	3.1	2.1	25
26	1.0	2.5	0.5	0.2	1.6	2.9	3.8	2.0	0.4	2.8	2.1	26
27	0.9	1.9	0.5		1.0	1.5	3.8	1.5	0.3	1.8	1.5	27
28	0.4	0.6			1.4	2.2	2.3	0.6		2.0	1.3	28
29	0.7	0.3	0.2		0.4	1.7	2.1	0.5	0.1	1.5	1.0	29
30	1.1	0.6	0.2	0.6	0.3	1.1	3.6	0.8	0.3	1.4	1.0	30
31	0.4			0.2		1.1	2.1	0.1	0.1	1.0	0.6	31
32						0.1				0.1	0.04	32
33							0.7			0.1	0.1	33
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	8	17	11	7	14	17	7	25	18	38	81	
SAMPLING WEIGHT(kg)	617	1689	1064	1056	1222	2207	775	2306	2120	4205	8631	
No. F.MEASURED	1314	3939	2964	2348	2801	4839	1450	5253	5312	9090	19655	
MEAN LENGTH(cm)	12.5	12.9	12.3	12.8	12.7	13.0	13.3	12.8	12.5	13.0	12.9	
MEAN WEIGHT (g)	228	246	203	230	234	257	293	240	215	258	245	
DEPTH RANGE (m)	850/1234	859/1204	810/1141	888/1181	736/1098	493/1159	836/994	850/1234	810/1181	493/1159	493/1234	

TABLE XXVIII: ROUGHHEAD GRENADIER, DIV. 3M, 2001: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUL	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
6			0.4						0.2		0.1	6
7	1.4	1.6	2.6	1.2	2.9	2.5	8.2	1.5	2.1	4.1	2.4	7
8	26.7	10.3	20.2	20.9	19.9	18.7	15.1	13.3	20.4	18.3	18.1	8
9	81.4	53.5	70.0	75.2	57.5	60.8	48.2	58.5	71.8	56.3	64.8	9
10	253.9	165.8	174.8	179.3	179.9	172.1	151.4	181.5	176.4	170.4	176.4	10
11	192.0	141.3	166.2	192.5	182.1	151.8	165.8	150.3	175.3	168.2	167.1	11
12	167.5	216.4	178.3	227.9	137.8	130.7	203.0	207.7	195.5	151.3	188.8	12
13	155.1	151.9	155.8	168.6	144.4	121.8	170.9	152.4	160.2	143.4	154.4	13
14	69.4	100.9	111.1	72.0	99.7	106.1	85.2	95.3	97.6	98.2	97.1	14
15	22.1	67.2	51.7	31.4	62.1	61.7	48.7	59.2	44.7	58.7	51.7	15
16	9.3	42.7	28.1	17.3	44.1	40.7	16.5	36.7	24.4	36.2	30.3	16
17	4.1	13.0	10.8	6.6	17.4	26.1	6.2	11.4	9.3	17.5	11.7	17
18	2.8	6.0	9.1	1.4	8.3	13.3	4.2	5.4	6.4	9.0	6.7	18
19		7.3	3.3	1.9	4.8	6.1	11.6	6.0	2.8	6.9	4.6	19
20	4.3	3.3	4.6	1.1	4.5	14.2	10.2	3.4	3.4	9.1	4.7	20
21	5.7	4.2	4.2	1.0	2.8	6.9	8.2	4.5	3.1	5.5	4.0	21
22	1.6	4.5	2.2	0.9	11.1	12.7	8.2	4.0	1.7	10.9	4.4	22
23	2.8	4.3	3.6	0.9	3.9	10.9	8.2	4.1	2.7	7.2	4.1	23
24		1.7	1.1		4.0	8.2	9.6	1.4	0.7	6.8	2.3	24
25		2.2			4.0	8.9	6.8	1.8		6.3	1.9	25
26		1.1	0.3		1.2	5.6	3.4	0.9	0.2	3.2	1.0	26
27			0.3		2.3	6.0	6.8		0.2	4.6	1.1	27
28			0.3		2.8	4.0	3.4		0.2	3.3	0.8	28
29			0.3			3.4			0.2	1.1	0.3	29
30		0.6	0.6		2.4	4.1		0.5	0.4	2.3	0.8	30
31						0.8				0.3	0.1	31
32						0.8				0.3	0.1	32
33												33
34												34
35												35
36						1.1				0.4	0.1	36
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	13	13	8	6	5	2	16	21	13	50	
SAMPLING WEIGHT(kg)	223	1029	1514	882	534	782	200	1253	2395	1516	5164	
No. F.MEASURED	603	2734	3846	2657	1214	1439	455	3337	6503	3108	12948	
MEAN LENGTH(cm)	12.0	12.9	12.6	12.2	13.0	13.7	13.2	12.8	12.5	13.3	12.7	
MEAN WEIGHT (g)	189	239	223	194	258	326	276	231	213	284	234	
DEPTH RANGE (m)	852/1113	594/1420	862/1090	879/1091	689/1121	769/1133	911/1071	594/1420	862/1091	689/1133	594/1420	

TABLE XXIX: ROUGHHEAD GRENADIER, DIV. 3N, 2001: length composition of the trawl catches.

LENGTH GROUP	MAR	MAY	JUL	AUG	NOV	DEC	1st Q.	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
7		3.0	2.5		2.5			3.0	1.7	2.3	2.4	7
8	7.6	16.5	6.0	3.6	14.0	7.3	7.6	16.5	5.2	13.4	13.3	8
9	38.2	86.6	71.9	60.5	68.3	54.7	38.2	86.6	68.3	67.1	75.7	9
10	87.2	179.6	176.2	201.9	167.8	127.7	87.2	179.6	184.5	164.2	170.5	10
11	76.4	146.8	216.5	237.7	182.4	222.6	76.4	146.8	223.3	186.0	163.8	11
12	171.5	157.2	102.8	150.5	204.8	317.5	171.5	157.2	118.1	214.8	165.0	12
13	101.0	132.8	134.2	173.5	167.2	124.1	101.0	132.8	146.8	163.3	140.0	13
14	82.0	92.8	95.8	110.2	94.1	36.5	82.0	92.8	100.4	89.0	92.4	14
15	60.7	40.6	37.8	30.0	48.1	25.5	60.7	40.6	35.3	46.1	42.4	15
16	34.6	6.0	17.7	6.1	18.9	21.9	34.6	6.0	14.0	19.1	12.4	16
17	48.3	27.9	23.9		10.7	25.5	48.3	27.9	16.2	12.0	23.7	17
18	31.8	23.2	25.2	6.1	5.7		31.8	23.2	19.1	5.2	18.9	18
19	49.2	18.5	20.7	2.4	3.6	3.6	49.2	18.5	14.8	3.6	16.6	19
20	43.5	16.1	3.4		0.8	7.3	43.5	16.1	2.3	1.4	12.3	20
21	33.0	13.2	5.5		2.4	7.3	33.0	13.2	3.7	2.8	10.6	21
22	28.6	10.4	12.7		3.9	7.3	28.6	10.4	8.6	4.2	9.9	22
23	28.6	8.5	8.1	5.8	2.4	3.6	28.6	8.5	7.4	2.5	8.3	23
24	19.3	5.7	6.2	8.7	1.1	3.6	19.3	5.7	7.0	1.4	5.9	24
25	19.3	4.2	4.5	2.9	0.4		19.3	4.2	4.0	0.4	4.3	25
26	18.1	4.7	8.3		0.4	3.6	18.1	4.7	5.7	0.7	4.9	26
27	1.6	0.9	7.6		0.4		1.6	0.9	5.2	0.4	1.5	27
28	6.0	2.0	7.6				6.0	2.0	5.2		2.3	28
29	4.4	1.1	3.1				4.4	1.1	2.1		1.2	29
30	4.4	0.9	1.7				4.4	0.9	1.1		1.0	30
31		0.7						0.7			0.4	31
32	4.4						4.4				0.3	32
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	6	4	2	8	1	2	6	6	9	23	
SAMPLING WEIGHT(kg)	262	1076	475	226	906	99	262	1076	701	1005	3044	
No. F.MEASURED	336	2361	782	556	2120	274	336	2361	1338	2394	6429	
MEAN LENGTH(cm)	15.8	13.3	13.5	12.4	12.5	12.7	15.8	13.3	13.1	12.5	13.2	
MEAN WEIGHT (g)	484	281	305	212	214	227	484	281	275	215	279	
DEPTH RANGE (m)	1019/1238	893/1252	626/1153	889/1083	800/1300	1064/1102	1019/1238	893/1252	626/1153	800/1300	626/1300	

TABLE XXX: WITCH FLOUNDER, DIV. 3L, 2001: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	AUG	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
20			0.6	1.3			0.9		0.3	20
22			2.6	0.9			1.9		0.7	22
24		0.7	3.8	2.2		0.4	3.2		1.5	24
26		4.0	9.1	5.7	9.2	2.5	7.7	9.2	4.7	26
28	3.7	6.8	14.4	20.1		5.7	16.7		9.7	28
30	41.1	23.0	34.2	41.0	27.5	29.9	36.9	27.5	32.5	30
32	43.8	47.5	57.0	67.4	18.3	46.1	61.1	18.3	51.1	32
34	103.7	94.5	110.6	106.4	36.7	98.0	108.9	36.7	100.4	34
36	100.8	163.1	142.3	144.6	174.3	139.4	143.2	174.3	141.9	36
38	103.9	187.2	173.2	178.7	211.0	155.5	175.4	211.0	164.8	38
40	159.5	188.4	149.2	165.4	174.3	177.4	155.6	174.3	168.9	40
42	106.1	102.8	113.0	106.1	100.9	104.0	110.3	100.9	106.3	42
44	83.9	77.9	64.5	61.6	156.0	80.2	63.4	156.0	76.0	44
46	51.3	42.1	44.8	55.8	55.0	45.6	49.2	55.0	47.3	46
48	69.4	16.0	25.5	15.7	9.2	36.3	21.6	9.2	29.8	48
50	51.3	24.0	27.3	12.7	18.3	34.3	21.5	18.3	28.9	50
52	51.7	14.5	19.6	8.5	9.2	28.7	15.2	9.2	22.9	52
54	14.1	5.3	4.1	4.8		8.7	4.4		6.8	54
56	15.8	1.2	4.1	1.3		6.8	3.0		5.1	56
58		0.9				0.5			0.3	58
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	10	11	7	1	13	18	1	32	
SAMPLING WEIGHT(kg)	187	574	652	423	53	761	1075	53	1889	
No. F.MEASURED	343	1192	1393	987	109	1535	2380	109	4024	
MEAN LENGTH(cm)	42.0	40.1	39.8	39.3	40.6	40.8	39.6	40.6	40.3	
MEAN WEIGHT (g)	564	465	462	439	481	503	453	481	483	
DEPTH RANGE (m)	999/1188	861/1114	789/1141	715/1186	608/639	861/1188	715/1186	608/639	608/1188	

TABLE XXXI: WITCH FLOUNDER, DIV. 3M, 2001: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUL	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
22				0.8			0.3		0.1	22
24		0.1	0.2	2.5		0.1	1.1		0.5	24
26	7.0	2.6	1.7	4.7		2.8	2.9		2.8	26
28	12.2	4.0	3.7	15.0		4.4	8.2		5.7	28
30	11.7	4.0	18.1	38.9	33.1	4.3	26.5	33.1	12.5	30
32	47.9	34.1	27.6	64.1	58.0	34.7	42.4	58.0	37.6	32
34	86.9	71.5	64.8	115.7	122.9	72.2	85.4	122.9	77.4	34
36	145.5	111.7	127.9	144.6	122.9	113.2	134.6	122.9	120.9	36
38	170.2	175.8	162.8	159.3	131.1	175.5	161.4	131.1	170.1	38
40	158.1	223.1	169.1	134.9	183.7	220.2	155.3	183.7	196.9	40
42	136.1	136.0	149.4	101.2	153.4	136.0	129.9	153.4	134.0	42
44	69.3	118.9	143.9	75.4	103.6	116.7	116.2	103.6	116.4	44
46	64.9	68.5	79.3	69.8	45.6	68.4	75.5	45.6	70.7	46
48	22.3	25.0	27.1	27.9	4.1	24.9	27.5	4.1	25.6	48
50	38.1	14.5	15.8	20.2	12.4	15.6	17.6	12.4	16.3	50
52	20.2	2.2	5.3	11.8	18.0	3.0	7.9	18.0	4.9	52
54	9.8	6.1	2.0	7.8	8.3	6.2	4.3	8.3	5.6	54
56		1.2	1.2	3.9	2.8	1.1	2.3	2.8	1.6	56
58		0.7		0.5		0.6	0.2		0.5	58
60				1.0			0.4		0.1	60
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	4	10	12	10	2	14	22	2	38	
SAMPLING WEIGHT(kg)	174	657	1011	1023	155	831	2034	155	3020	
No. F.MEASURED	343	1354	2066	2254	297	1697	4320	297	6314	
MEAN LENGTH(cm)	40.7	41.0	41.1	39.9	40.2	41.0	40.6	40.2	40.9	
MEAN WEIGHT (g)	494	497	503	467	472	497	488	472	494	
DEPTH RANGE (m)	852/989	860/1101	877/1084	884/1091	162/210	852/1101	877/1091	162/210	162/1101	

TABLE XXXII: WITCH FLOUNDER, DIV. 3N, 2001: length composition of the trawl catches.

LENGTH GROUP	MAR	MAY	JUL	AUG	SEP	NOV	1st Q.	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
22			1.9						1.3		0.5	22
24	3.7	1.4	3.9				3.7	1.4	2.9		1.7	24
26	3.7	7.8	7.8			6.0	3.7	7.8	5.6	6.0	6.4	26
28	11.2	10.2	11.6	11.9	9.6	27.4	11.2	10.2	11.3	27.4	14.5	28
30	22.4	21.5	20.9	71.4	4.8	52.6	22.4	21.5	22.6	52.6	28.9	30
32	70.9	56.6	48.1	101.2	72.1	101.5	70.9	56.6	57.4	101.5	67.5	32
34	116.0	103.3	106.7	196.4	120.2	157.8	116.0	103.3	117.5	157.8	121.1	34
36	157.7	126.3	120.0	125.0	101.0	141.0	157.7	126.3	117.0	141.0	127.7	36
38	161.3	150.2	143.4	160.7	197.1	114.1	161.3	150.2	154.8	114.1	144.3	38
40	198.9	108.8	155.7	83.3	149.0	90.9	198.9	108.8	147.7	90.9	123.0	40
42	89.9	107.7	119.5	71.4	110.6	115.1	89.9	107.7	113.4	115.1	110.6	42
44	93.5	79.8	89.6	71.4	110.6	101.5	93.5	79.8	91.7	101.5	89.6	44
46	37.4	77.0	62.0	29.8	52.9	31.4	37.4	77.0	57.3	31.4	57.9	46
48	7.4	80.7	64.7	17.9	33.7	13.3	7.4	80.7	54.6	13.3	52.9	48
50	7.5	19.9	15.5	23.8	4.8	24.3	7.5	19.9	14.3	24.3	18.3	50
52	3.7	21.2	21.3	23.8	9.6	9.7	3.7	21.2	19.4	9.7	17.2	52
54	14.9	11.5	7.7	6.0	19.2	8.5	14.9	11.5	9.6	8.5	10.3	54
56		9.4				4.9		9.4		4.9	4.6	56
58		1.0		6.0				1.0	0.6		0.6	58
60		1.8						1.8			0.7	60
62		1.0			4.8			1.0	0.9		0.7	62
64		2.0						2.0			0.7	64
66		1.0						1.0			0.4	66
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	6	3	1	1	3	2	6	5	3	16	
SAMPLING WEIGHT(kg)	119	594	172	71	104	210	119	594	346	210	1269	
No. F.MEASURED	267	1120	353	168	208	489	267	1120	729	489	2605	
MEAN LENGTH(cm)	39.5	41.2	40.7	38.8	40.5	39.0	39.5	41.2	40.5	39.0	40.4	
MEAN WEIGHT (g)	442	530	496	429	489	435	442	530	489	435	490	
DEPTH RANGE (m)	1019/1238	849/1252	626/955	889/1083	580/600	800/1300	1019/1238	849/1252	580/1083	800/1300	580/1300	

TABLE XXXIII: WITCH FLOUNDER, DIV. 3O, 2001: length composition of the trawl catches.

LENGTH GROUP	JUL	SEP	OCT	NOV	DEC	3rd Q.	4th Q.	YEAR	LENGTH GROUP
20					0.1		0.1	0.1	20
22			9.8	3.8	2.2		3.0	2.9	22
24		7.1	9.8	10.1	9.8	3.3	9.9	9.7	24
26		7.1	24.5	12.8	24.3	3.3	20.3	19.7	26
28		7.1	29.4	35.7	66.2	3.3	54.2	52.5	28
30		35.7	49.0	85.9	107.8	16.3	98.0	95.4	30
32	77.9	35.7	107.8	113.6	145.6	58.6	133.0	130.6	32
34	64.9	107.1	142.2	131.0	140.8	84.2	137.4	135.7	34
36	129.9	128.6	137.3	144.4	113.1	129.3	124.9	125.1	36
38	259.7	107.1	137.3	111.7	112.2	190.0	112.9	115.4	38
40	181.8	92.9	152.0	135.0	61.2	141.2	90.3	92.0	40
42	123.4	207.1	93.1	61.9	67.7	161.7	66.6	69.7	42
44	71.4	92.9	34.3	63.7	70.6	81.2	66.9	67.3	44
46	51.9	57.1	14.7	26.4	43.1	54.3	36.3	36.8	46
48	13.0	64.3	19.6	21.5	15.1	36.4	17.5	18.1	48
50	6.5	14.3	14.7	15.1	12.7	10.1	13.6	13.5	50
52		14.3	4.9	15.1	7.0	6.5	9.8	9.7	52
54	19.5	7.1	4.9	8.9	0.6	13.8	3.7	4.0	54
56		14.3	9.8	3.2		6.5	1.5	1.7	56
58			4.9				0.2	0.2	58
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	1	1	7	8	2	16	18	
SAMPLING WEIGHT(kg)	76	68	76	542	556	144	1174	1318	
No. F.MEASURED	154	140	204	1325	1521	294	3050	3344	
MEAN LENGTH(cm)	40.2	41.0	38.0	38.0	36.9	40.6	37.3	37.5	
MEAN WEIGHT (g)	466	513	404	404	365	487	380	384	
DEPTH RANGE (m)	111/211	368/387	100/332	79/447	166/404	111/387	79/447	79/447	

TABLE XXXIV: RED HAKE, DIV. 3N, 2001: length composition of the trawl catches.

LENGTH GROUP	OCT =YEAR	LENGTH GROUP
32	26.3	32
33		33
34	13.2	34
35	52.6	35
36		36
37		37
38		38
39		39
40	13.2	40
41	65.8	41
42	39.5	42
43	13.2	43
44	52.6	44
45	39.5	45
46	26.3	46
47	78.9	47
48	39.5	48
49	105.3	49
50	52.6	50
51	144.7	51
52	52.6	52
53	39.5	53
54	39.5	54
55	13.2	55
56	26.3	56
57	39.5	57
58		58
59	13.2	59
60		60
61		61
62		62
63		63
64		64
65	13.2	65
TOTAL	1000	
No. SAMPLES	1	
SAMPLING WEIGHT(kg)	101	
No. F.MEASURED	76	
MEAN LENGTH(cm)	48.2	
DEPTH RANGE (m)	343/364	

TABLE XXXV: RED HAKE, DIV. 3O, 2001: length composition of the trawl catches.

LENGTH GROUP	OCT	NOV	DEC	4th Q. =YEAR	LENGTH GROUP
21	7.4	1.1		0.6	21
22		3.4		1.7	22
23	7.4	1.0	1.5	1.3	23
24	5.0	3.7	0.8	2.3	24
25		4.3	1.0	2.6	25
26	10.0	6.7	5.2	6.0	26
27	7.4	11.7	7.0	9.3	27
28	12.4	8.7	3.4	6.1	28
29	19.8	9.7	5.7	7.8	29
30	15.0	18.0	10.3	14.1	30
31	12.4	15.2	9.8	12.5	31
32	7.6	18.1	29.8	23.9	32
33	27.4	29.4	15.2	22.3	33
34	37.4	26.7	21.0	23.9	34
35	27.6	41.9	35.9	38.8	35
36	40.0	28.7	55.2	42.0	36
37	32.4	32.6	29.8	31.2	37
38	69.4	37.6	40.4	39.2	38
39	49.8	37.6	39.0	38.4	39
40	74.4	48.9	76.8	63.0	40
41	57.2	55.4	78.2	66.8	41
42	35.0	42.2	78.6	60.4	42
43	52.4	61.3	51.4	56.3	43
44	44.8	57.0	61.6	59.2	44
45	52.2	65.0	59.9	62.3	45
46	32.4	48.1	46.5	47.2	46
47	30.0	34.2	45.7	39.9	47
48	27.5	33.2	46.4	39.8	48
49	20.1	24.0	35.8	29.9	49
50	25.0	30.4	16.8	23.6	50
51	22.5	16.1	16.2	16.2	51
52	25.3	29.4	10.8	20.1	52
53	10.2	20.6	15.7	18.1	53
54	22.6	9.5	5.9	7.8	54
55	12.6	10.9	9.4	10.1	55
56	7.7	14.6	8.0	11.3	56
57	2.6	3.2	4.2	3.7	57
58	15.0	10.4	8.1	9.3	58
59	17.4	7.9	1.6	4.8	59
60	7.4	6.3	3.8	5.1	60
61		11.5	2.9	7.1	61
62		5.0	2.7	3.8	62
63	7.4	1.5	0.6	1.1	63
64		7.5	0.3	3.8	64
65	5.0	2.0	0.6	1.3	65
66		5.1	0.3	2.6	66
67		0.8		0.4	67
68		1.1		0.5	68
69	2.6	0.9		0.4	69
70	2.6			0.0	70
71		0.2		0.1	71
TOTAL	1000	1000	1000	1000	
No. SAMPLES	3	20	9	32	
SAMPLING WEIGHT(kg)	154	2221	1153	3528	
No. F.MEASURED	192	2338	1358	3888	
MEAN LENGTH(cm)	42.6	43.3	42.7	43.0	
DEPTH RANGE (m)	100/430	68/511	164/492	68/511	

Fig. 1A - Breakdown of the 2001 Portuguese trawl directed effort by species.

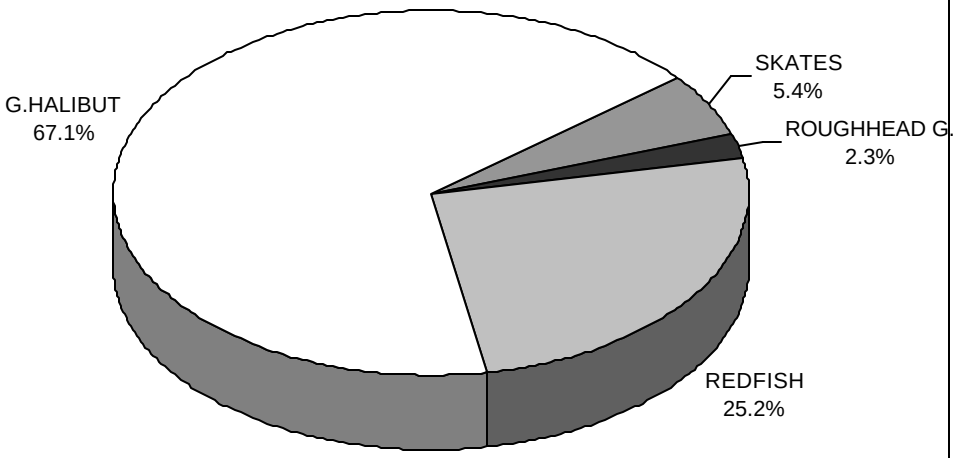
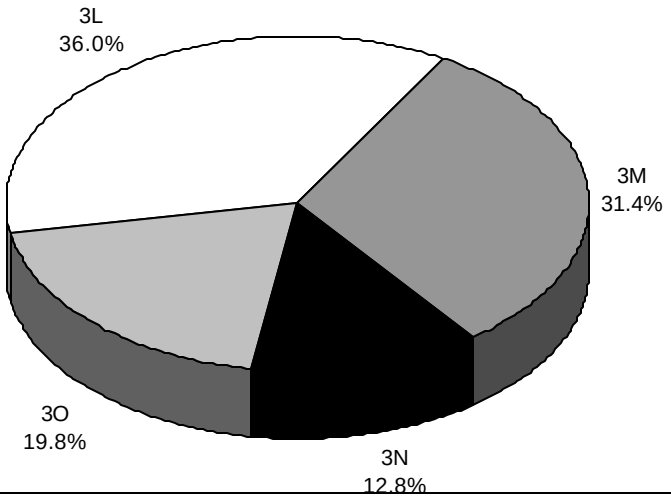
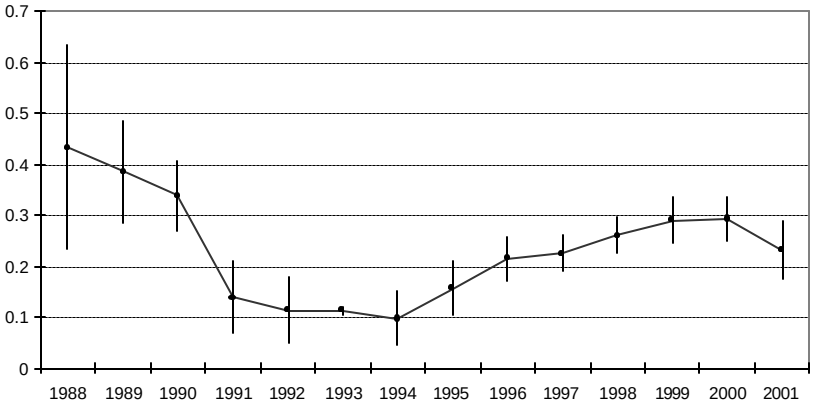
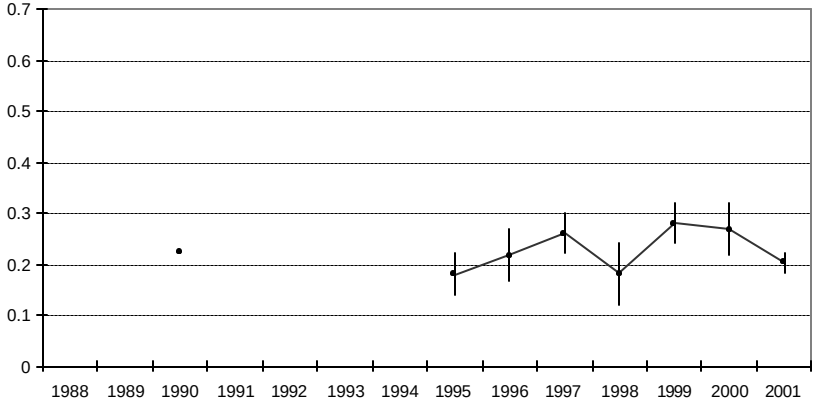


Fig. 1B - Breakdown of the 2001 Portuguese trawl directed effort by divisions.

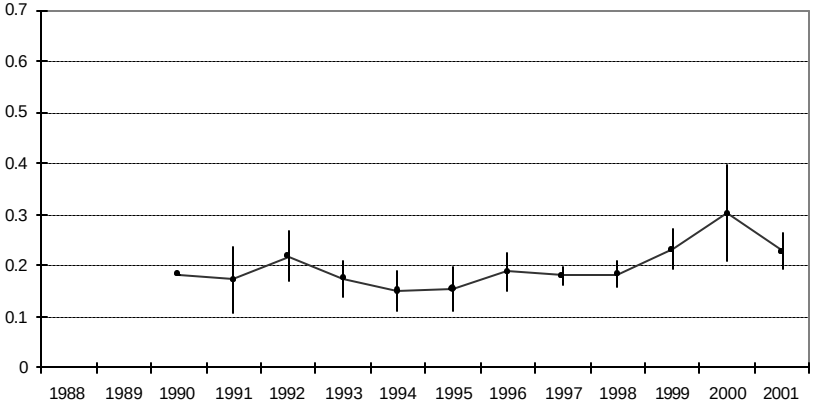




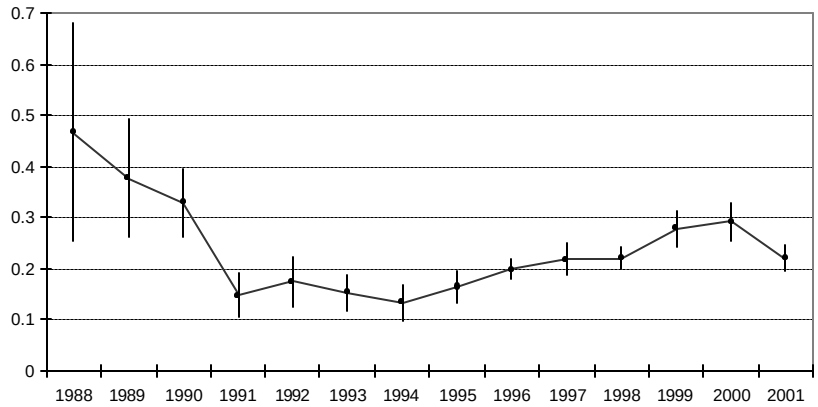
Div.3L



Div.3M



Div.3N



Div.3LMN

Fig. 2 : Greenland halibut trawl catch rates by division, 1988 - 2001.

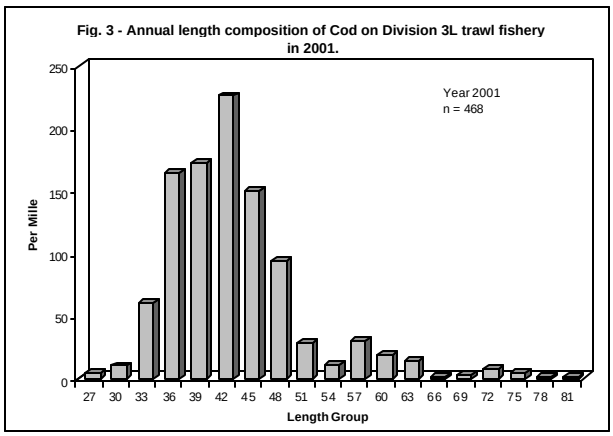


Fig. 3 - Annual length composition of Cod on Division 3L trawl fishery in 2001.

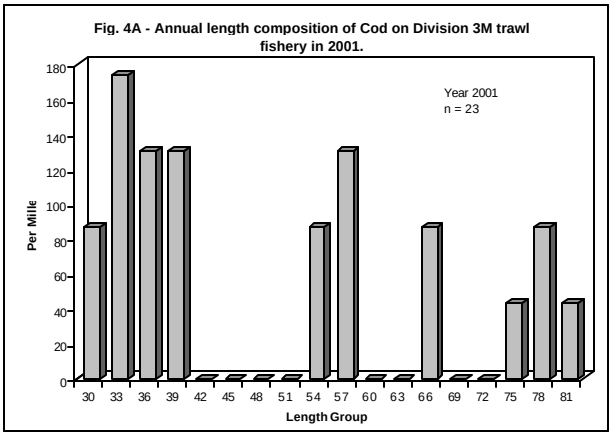


Fig. 4A - Annual length composition of Cod on Division 3M trawl fishery in 2001.

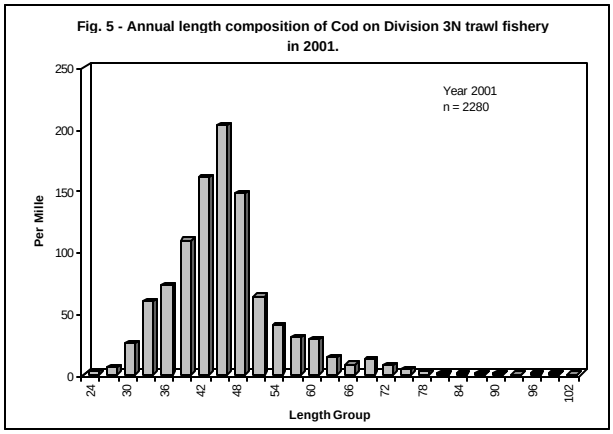


Fig. 5 - Annual length composition of Cod on Division 3N trawl fishery in 2001.

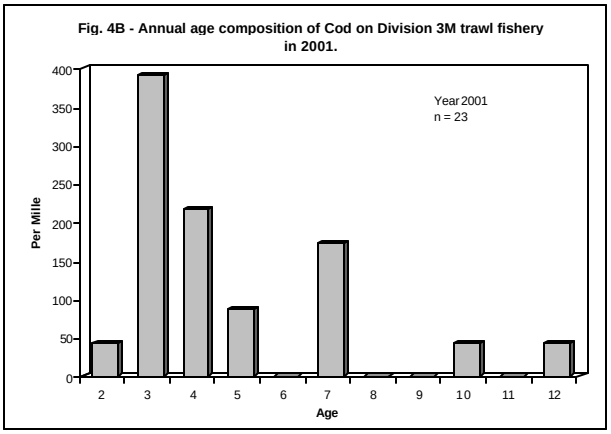


Fig. 4B - Annual age composition of Cod on Division 3M trawl fishery in 2001.

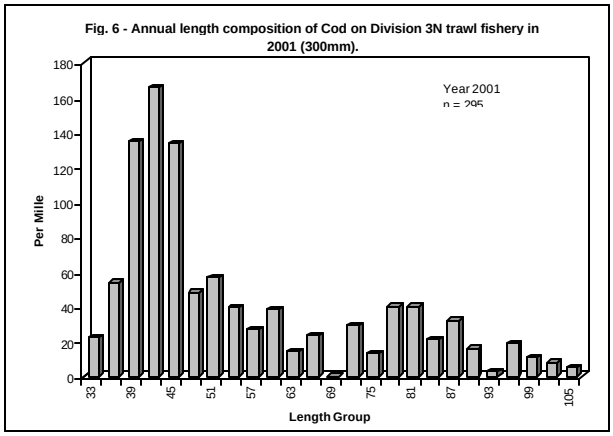


Fig. 6 - Annual length composition of Cod on Division 3N trawl fishery in 2001 (300mm).

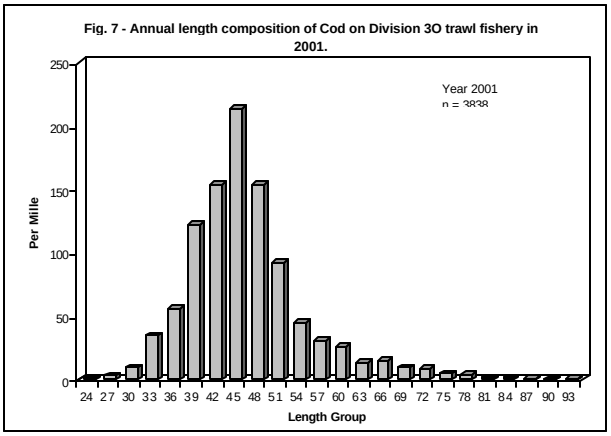


Fig. 7 - Annual length composition of Cod on Division 3O trawl fishery in 2001.

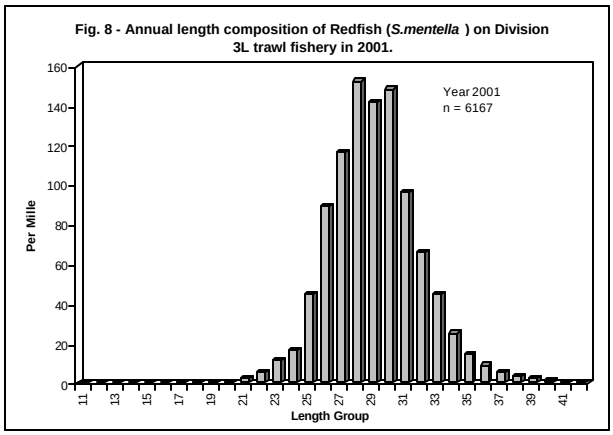


Fig. 8 - Annual length composition of Redfish (S.mentella) on Division 3L trawl fishery in 2001.
Year 2001
n = 6167
Per Mille
Length Group

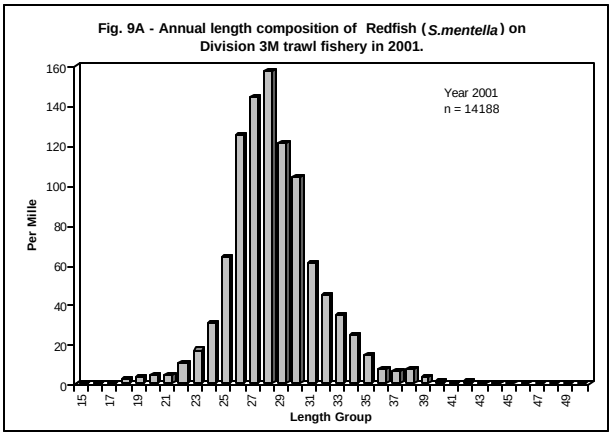


Fig. 9A - Annual length composition of Redfish (S.mentella) on Division 3M trawl fishery in 2001.
Year 2001
n = 14188
Per Mille
Length Group

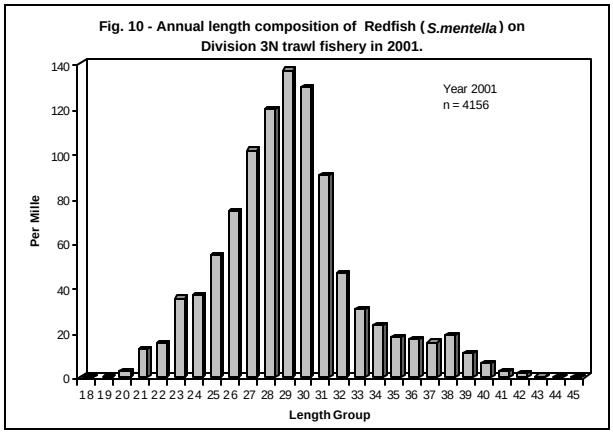


Fig. 10 - Annual length composition of Redfish (S.mentella) on Division 3N trawl fishery in 2001.
Year 2001
n = 4156
Per Mille
Length Group

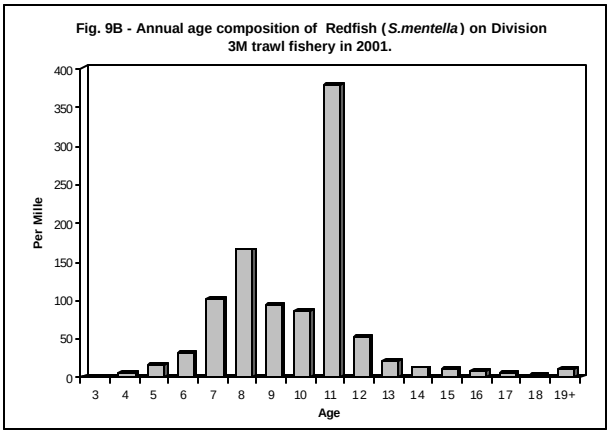


Fig. 9B - Annual age composition of Redfish (S.mentella) on Division 3M trawl fishery in 2001.
Per Mille
Age

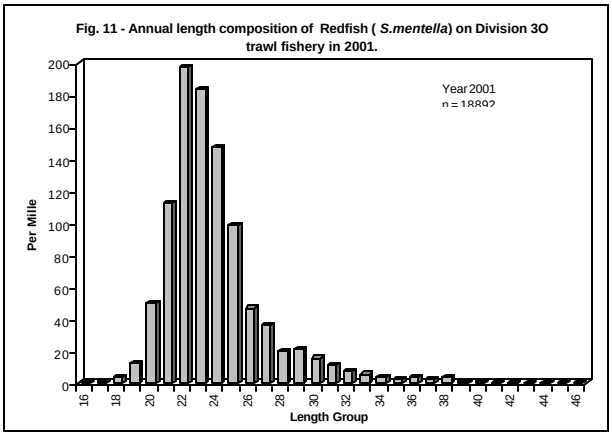


Fig. 11 - Annual length composition of Redfish (S.mentella) on Division 3O trawl fishery in 2001.
Year 2001
Per Mille
Length Group

Fig. 12 - Annual length composition of Redfish (*S.marinus*) on Division 3M trawl fishery in 2001.

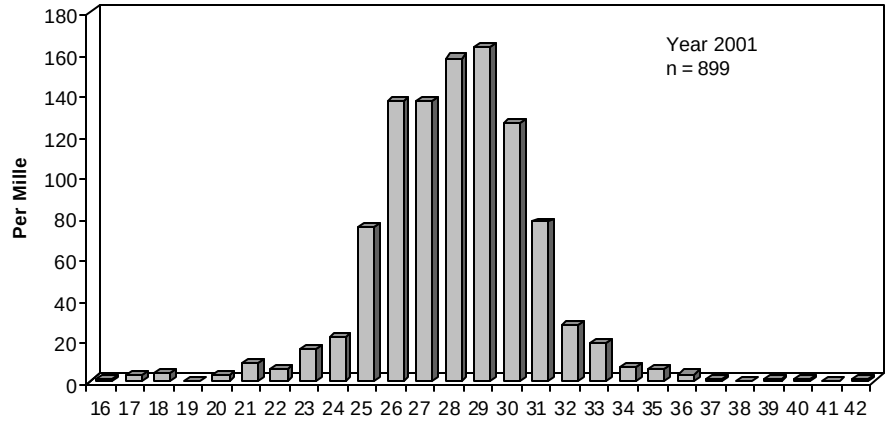


Fig. 13 - Annual length composition of Redfish (*S.marinus*) on Division 3N trawl fishery in 2001.

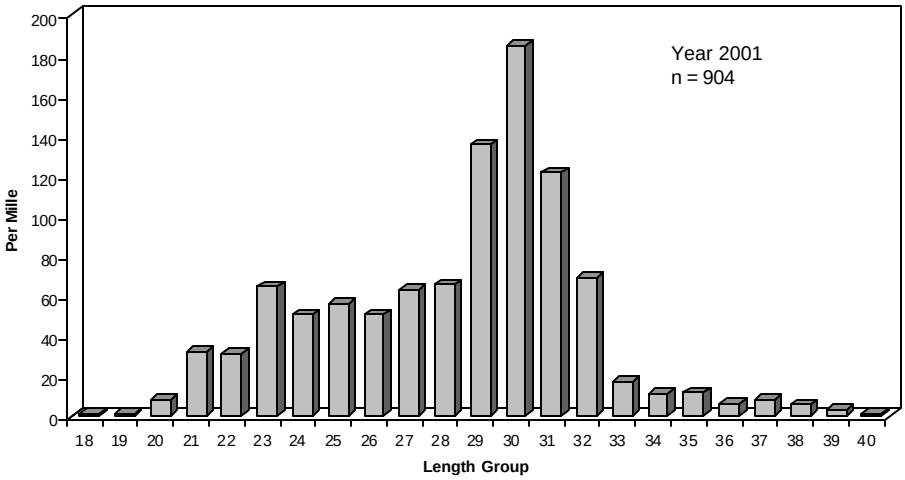


Fig. 14 - Annual length composition of Redfish (*S.marinus*) on Division 3O trawl fishery in 2001.

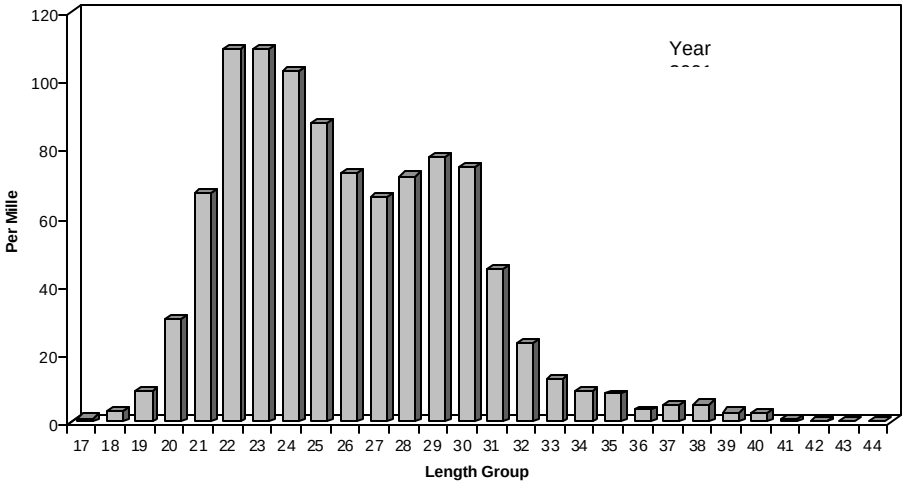


Fig. 15 - Annual length composition of American plaice on Division 3L trawl fishery in 2001.

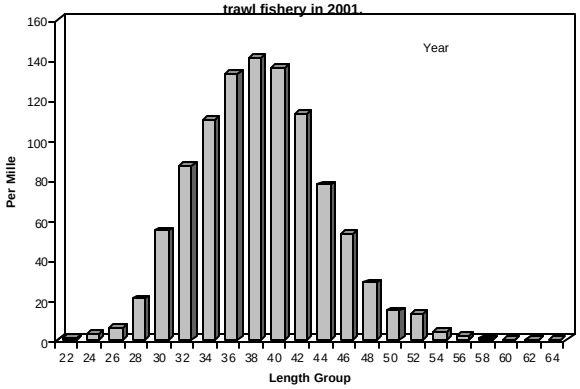


Fig. 16A - Annual length composition of American plaice on Division 3M trawl fishery in 2001.

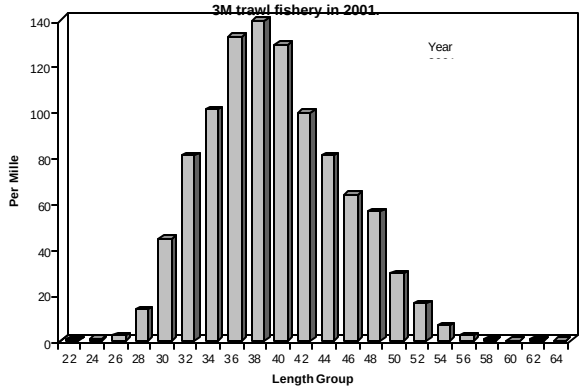


Fig. 17 - Annual length composition of American plaice on Division 3N trawl fishery in 2001.

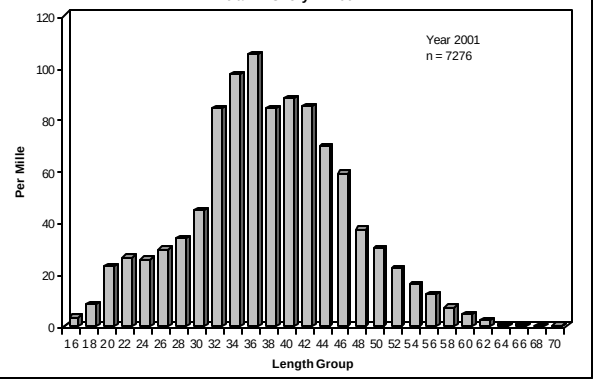


Fig. 16B - Annual age composition of American plaice on Division 3M trawl fishery in 2001.

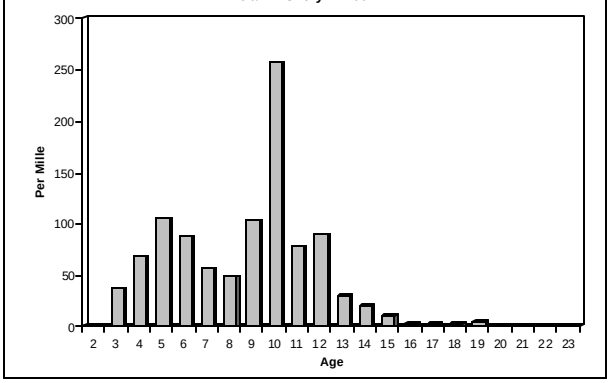


Fig. 18 - Annual length composition of American plaice on Division 3N trawl fishery in 2001 (300mm).

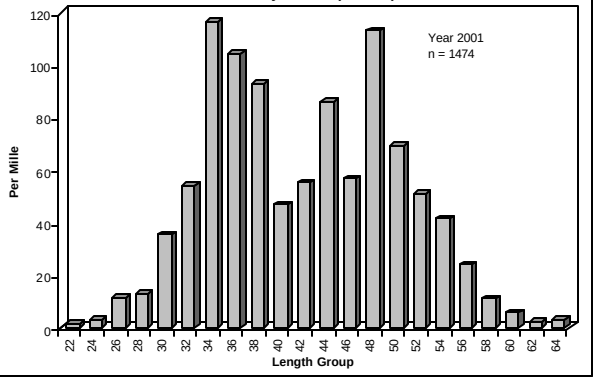


Fig. 19 - Annual length composition of American plaice on Division 3O trawl fishery in 2001.

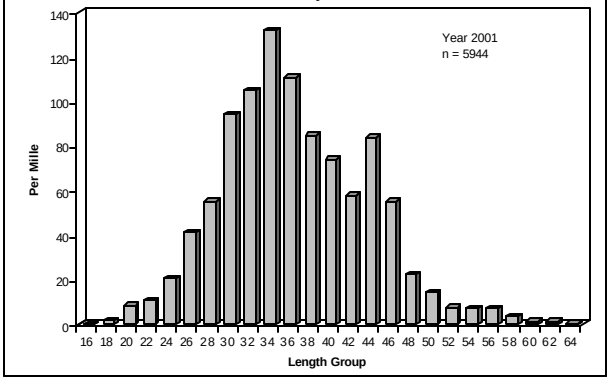


Fig. 20 - Annual length composition of Yellowtail flounder on Division 3N trawl fishery in 2001.

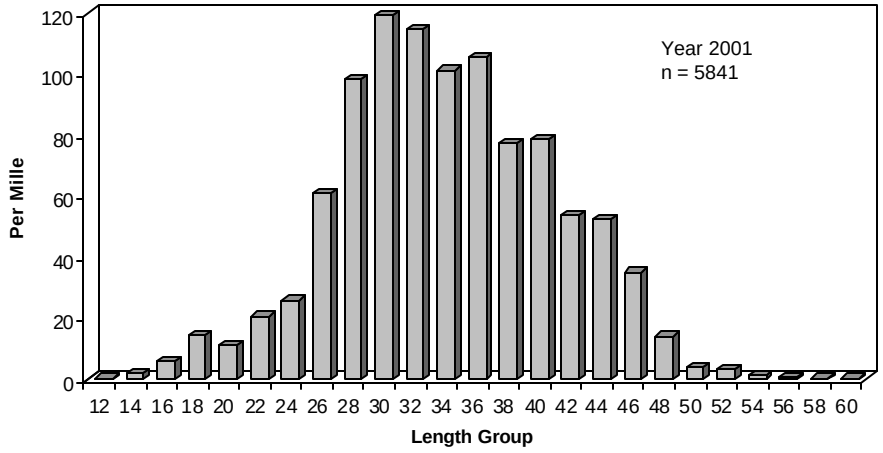


Fig. 21 - Annual length composition of Yellowtail flounder on Division 3N trawl fishery in 2001 (300 mm).

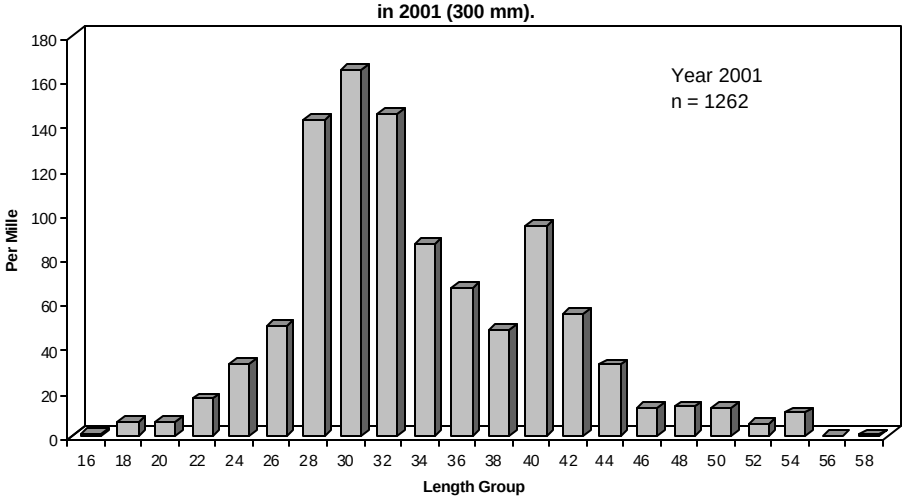


Fig. 22 - Annual length composition of Yellowtail flounder on Division 3O trawl fishery in 2001.

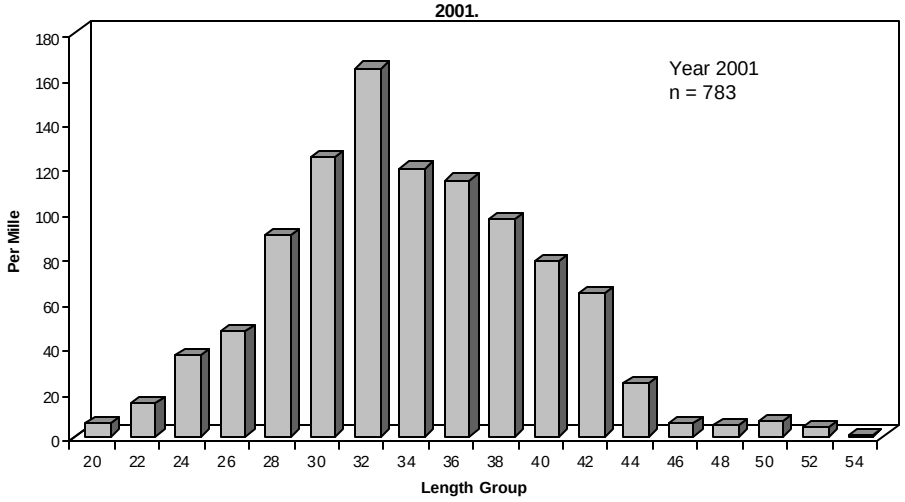


Fig. 23 - Annual length composition of Greenland halibut on Division 3L trawl fishery in 2001.

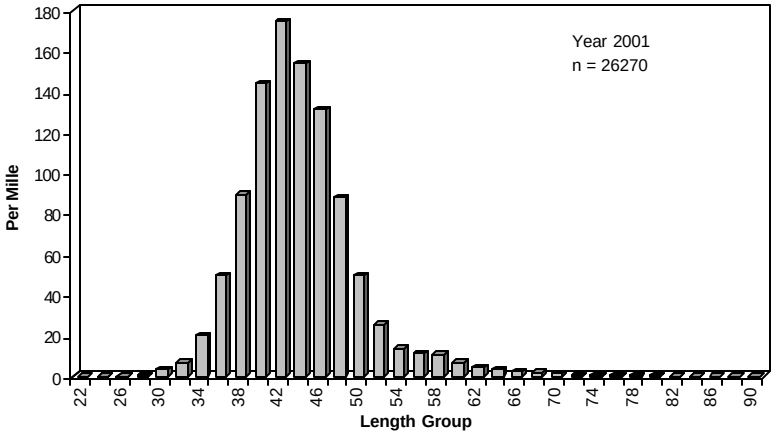


Fig. 24 - Annual length composition of Greenland halibut on Division 3M trawl fishery in 2001.

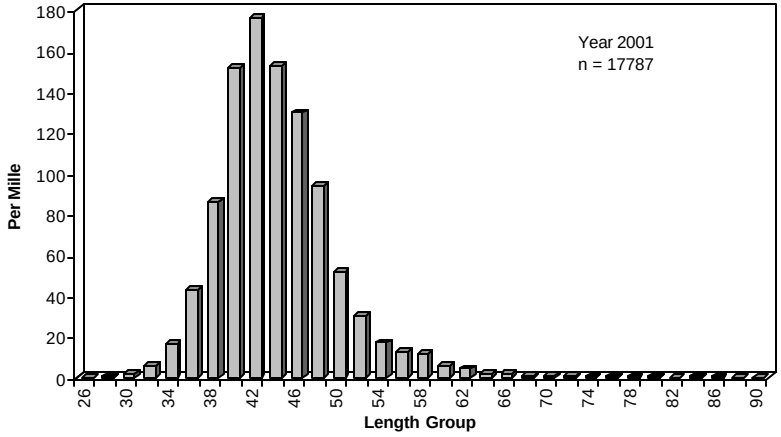


Fig. 25 - Annual length composition of Greenland halibut on Division 3N trawl fishery in 2001.

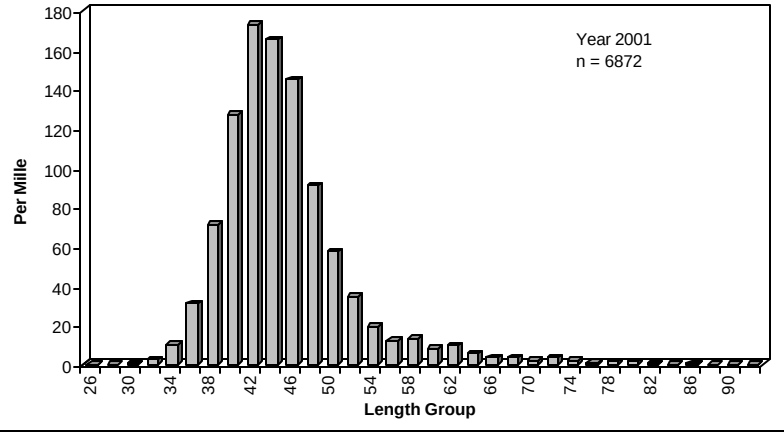


Fig. 26 - Annual length composition of Greenland halibut on Division 3O trawl fishery in 2001.

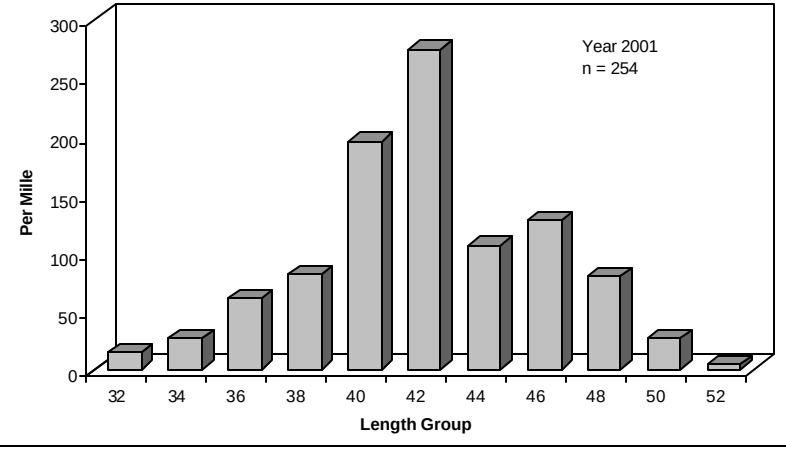


Fig. 27 - Annual length composition of Roughhead grenadier on Division 3L trawl fishery in 2001.

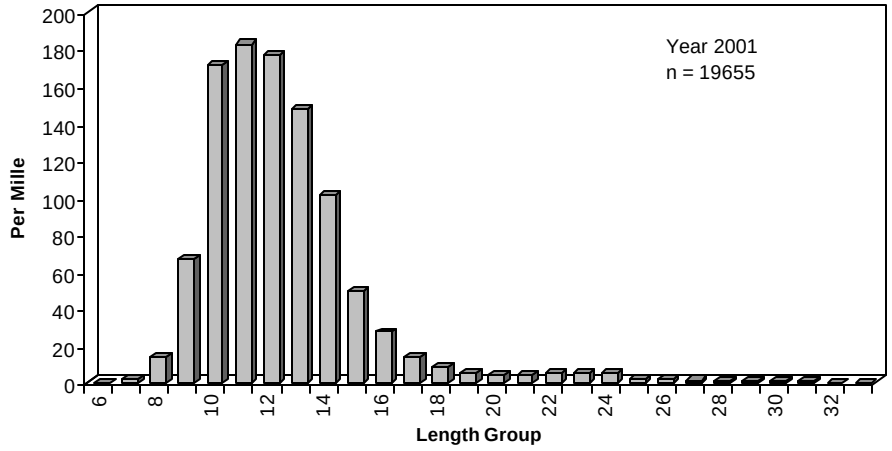


Fig. 28 - Annual length composition of Roughhead grenadier on Division 3M trawl fishery in 2001.

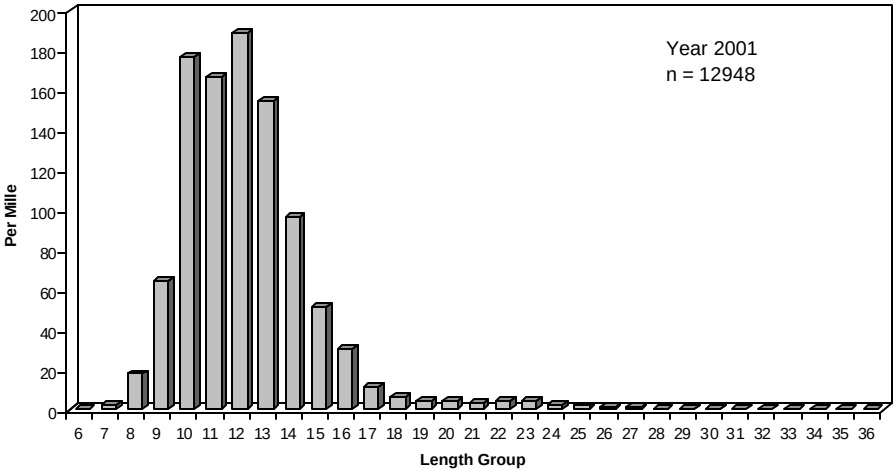


Fig. 29 - Annual length composition of Roughhead grenadier on Division 3N trawl fishery in 2001.

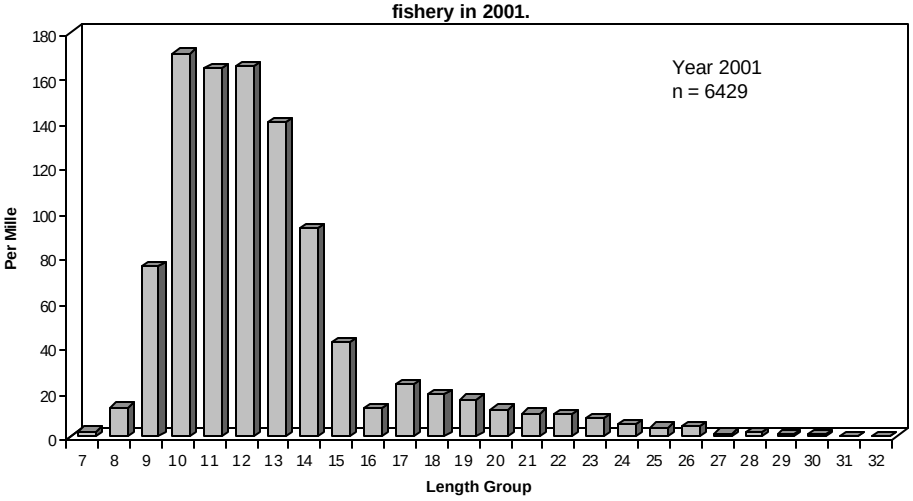


Fig. 30 - Annual length composition of Witch flounder on Division 3L trawl fishery in 2001.

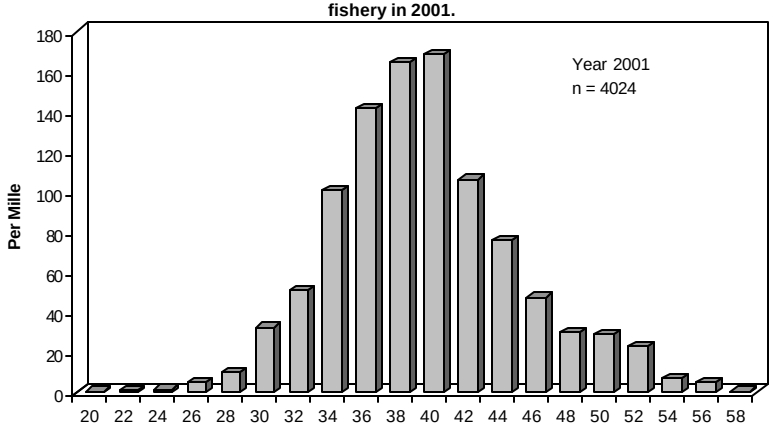


Fig. 31 - Annual length composition of Witch flounder on Division 3M trawl fishery in 2001.

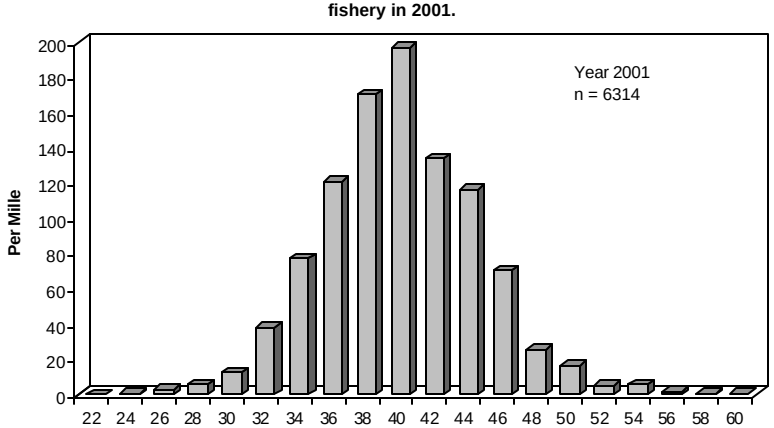


Fig. 32 - Annual length composition of Witch flounder on Division 3N trawl fishery in 2001.

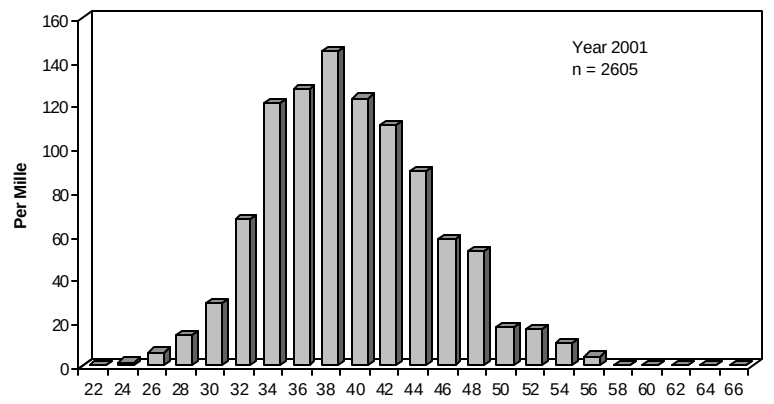


Fig. 33 - Annual length composition of Witch flounder on Division 3O trawl fishery in 2001.

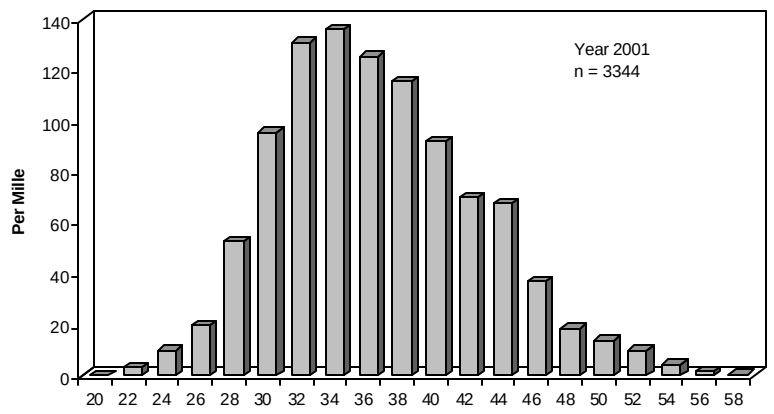


Fig. 33 - Annual length composition of Red hake on Division 3N trawl fishery in 2001.

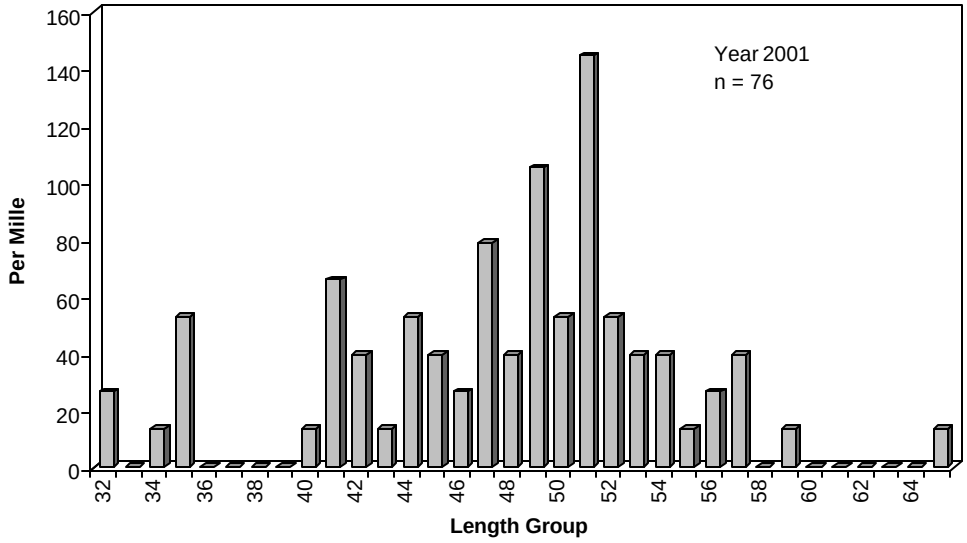
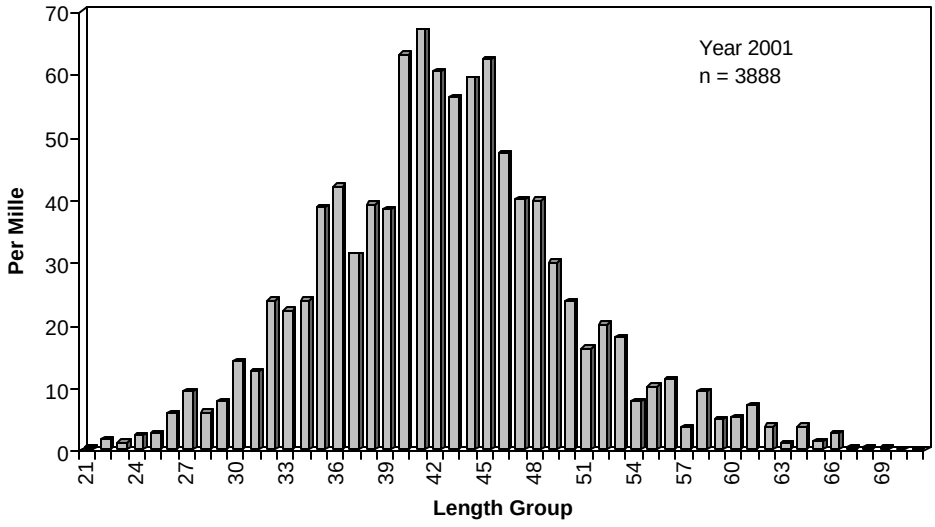


Fig. 34 - Annual length composition of Red hake on Division 3O trawl fishery in 2001.



APPENDIX

COD, divisions 3L, 3N and 3O

$$\log w = -5.2106+3.0879 \log l$$ (Hodder, 1964)

COD, division 3M

$$w = 0.0105 * l^{2.959}$$ (Vazquez, 2001)

REDFISH, divisions 3L, 3N and 3O

males $w = 0.01659*l^{2.9548}$

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

REDFISH (*S.mentella*), division 3M

$$w = 0.017*l^{2.953}$$ (Saborido Rey, pers.comm. 2001)

REDFISH (*S.marinus*), division 3M

$$w = 0.005*l^{3.331}$$ (Saborido Rey, pers.comm. 2000)

AMERICAN PLAICE, divisions 3L, 3N and 3O

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

AMERICAN PLAICE, division 3M

$$w = 0.0082 * l^{3.0444}$$ (Vazquez, 2000)

YELLOWTAIL FLOUNDER, divisions 3N and 3O

$$\log w = -5.434+3.443 \log l$$ (Pitt, 1978)

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

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

WITCH FLOUNDER, divisions 3L, 3M, 3N and 3O

$$w = 0.001083*l^{3.497}$$ (Bowering and Stansbury, 1984)