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PORtUGUESE RESEARCH REPORT FOR 2003

by

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A. Status of the fisheries

In 2003 the Portuguese nominal catches proceeding from NAFO Regulatory Sub Area 3 recorded 21,324 ton (Table I). 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), but dropped again in 2000 to 13,000 ton. Since then Portuguese nominal catch increased continuously, reaching 21,000 ton in 2003. This represents 30% increase from 2002 and is the highest level observed since 1994.

After a couple of years of relative stability (2001 and 2002) effort in fishing days increased 23% in 2003, doubling the fishing effort deployed back in 1998. This increase is supported by increases in the number of fishing days spent in divisions 3N and 3O, more 48% and 56% of the fishing days spent last year on each one of the southern divisions. On 2003 fourteen Portuguese stern trawlers have been recorded fishing in the NRA.

The raise in the nominal catches (Table II-B) in 2003 is the consequence of increases on all species but roughhead grenadier, with 3NO white hake (+100%) and 3O redfish (+37%) on top.

Greenland halibut overall catches increased 7% in 2003, being stable in Div. 3L (-6%) and 3O (+4%), while increasing in Div. 3M (+14%) but mainly in Div. 3N (+22%). Greenland halibut and roughhead grenadier continued to represent the bulk of the catches in Div. 3L (71% in 2002 and 78% in 2003). But in Div. 3N the relative weight of these two species has been declining from 76% in 1998 to 30% in 2003, while the importance of American plaice, yellowtail flounder and white hake (in 2002 and 2003) catches increase (Table I-A).

Like in previous years, redfish was the most important catch in Div. 3M (57% of the catch in this division). In Div. 3O redfish has maintained its importance as well, though representing just 62% of the catches in 2002 and 2003 against 83% in 2001.

B. Portuguese Annual Sampling Program

1. Catch and effort sampling.

Effort and CPUE data for 2003 Portuguese trawl fishery on the NAFO Regulatory Area were obtained through the revision of skipper logbooks from two trawlers, kindly supplied by its owners. 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 2003 logbooks available were processed in order to convert the 2003 Portuguese effort, reported in fishing days on the 2003 Portuguese STATLANT 21-B, into fishing hours (Table II-A/B).

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.

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 Table III. Data regarding directed effort and catch rates are presented in Table III to IV-B and Fig. 1.

The Greenland halibut cpue series was updated with the 2003 observed CPUEs. 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 CPUEs. 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 CPUEs are presented in Tables IV and Fig. 1, 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 (Table IV-A, Fig. 1). 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 CPUEs fell by half (from 0.335 ton/h to 0.178 ton/h). Between 1991 and 1994 catch rates remained stable at a low level. Since then catch rates gradually increased, reaching an upper level of 0.300 ton/h in 1999-2000. Catch rates declined in 2001 to the 1997-1998 level, and remained stable at that level in 2002 and 2003.

Greenland halibut catch rates in Div. 3N shown no apparent trend till 1998. An increase is observed in 1999 and 2000, when a maximum of 0.301 ton/h was reached. In 2001 catch rate dropped to 0.206 ton/h and oscillate in 2002-2003 between 0.266 and 0.215 ton/h (Table IV-A, Fig. 1).

For all three divisions combined (Table IV-A, Fig. 1) the observed catch rates series follows the Div. 3L pattern, since this is the division of Sub Area 3 with the highest concentration of Greenland halibut fishing effort.

2. Biological Sampling

In 2003 biological sampling was obtained from two 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, redfish (*S. mentella*), roughhead grenadier, American plaice, witch flounder, thorny skate and spinytail skate were sampled in Div. 3L, 3M, 3N and 3O (Table V). Cod were sampled in Div. 3L, 3N and 3O. Atlantic halibut, white hake and monkfish were sampled in Div. 3N and 3O. Yellowtail flounder and redfish (*S. marinus*) were sampled in Div. 3N.

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 length-weight relationships calculated from the commercial sampling in 2003, except for Div. 3N *S.marinus* where the relationship used was from 2001 (Alpoim, 2004).

Some sets in Div. 3O were made with a trawl net with 280 mesh size in the codend. In these few sets American plaice, thorny skate and monkfish (only 12 fish sampled and is not presented in this report) were sampled. Length

frequency for these catches, respective mean lengths and mean weights in the catch are presented for American plaice and thorny skate in Tables XVI-B, XXXVII-B and Fig 34.

2.1. Comments on length and age composition of the 2003 trawl catches.

2.1.1. Cod Div. 3N

Information on length composition of the cod by-catch in Div. 3N is available from July to November (Table VI, Fig. 2), from 48 m to 850 m depth.

Lengths between 42 cm and 54 cm dominated the catch, with a mode at the classes 48 cm and 51 cm (mean length and weight of 50.7cm and 1542g).

2.1.2. Cod Div. 3O

Information on length composition of the cod by-catch in Div. 3O is available for April and May, and August to November (Table VII, Fig. 3), from 122 m to 660 m depth.

Lengths between 48 cm and 57 cm dominated the catch, with a mode at the class 51 cm (mean length and weight of 55 cm and 1999 g).

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

Information on length composition of the redfish (*S. mentella*) trawl by-catch in Div. 3L is available for January to July (Table VIII, Fig. 4), from 690 m to 1081 m depth.

Lengths between 25 cm and 33 cm dominated catches, with no clear mode (mean length and weight of 30 cm and 418 g).

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

Information on length composition of the redfish (*S. mentella*) trawl catch in Div. 3M is available for January to April (Table IX, Fig. 5), from 728 m to 1034 m depth.

Lengths between 27 cm and 33 cm dominated catches, with a mode at the classes 29 cm and 30 cm (mean length and weight of 31 cm and 434 g).

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

Information on length composition of the redfish (*S. mentella*) trawl by-catch in Div. 3N is available for April to November (Table X, Fig. 6), from 63 m to 1200 m depth.

Lengths between 21 cm and 24 cm dominated catches, with a mode at the classes 22 cm and 23 cm (mean length and weight of 26 cm and 281 g).

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

Information on length composition of the redfish (*S. mentella*) trawl catch in Div. 3O is available for April and May, and August to November (Table XI, Fig. 7), from 145 m to 821 m depth.

Lengths between 21 cm and 24 cm dominated catches, with a mode at classes 22 cm and 23 cm (mean length and weight of 25 cm and 259 g).

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

Information on length composition of the redfish (*S. marinus*) trawl by-catch in Div. 3N is available only for August (Table XII, Fig. 8) from 206m to 289m depth.

The sampling is only from one month, the lengths between 30cm and 35cm dominated catches, with no clear mode (mean length and weight of 33cm and 513g).

2.1.8. American plaice Div. 3L

Information on length composition of the American plaice by-catch in Div. 3L is available from February to April (Table XIII, Fig. 10) from 716m to 1066m depth.

Lengths between 34cm and 42cm dominated catches, with a clear mode at 40 cm (mean length and weight of 40cm and 618g).

2.1.9. American plaice Div. 3M

Information on length composition of the American plaice by-catch in Div. 3M is available for February and March (Table XIV, Fig. 11) from 839m to 1055m.

Lengths between 36cm and 50cm dominated catches (mean length and weight of 44cm and 905g).

2.1.10. American plaice Div. 3N

Information on length composition of the American plaice by-catch in Div. 3N is available for April to November, (Table XV, Fig. 12) from 48m to 1277m depth.

Lengths between 30cm and 46cm dominated catches, with a modal class at 38cm (mean length and weight of 40cm and 699g).

2.1.11. American plaice Div. 3O

2.1.11.1. Common mesh size (135mm).

Information on length composition of the American plaice by-catch in Div. 3O is available for April and May, and August to November (Table XVI-A, Fig. 13) from 122m to 660m depth.

Lengths between 28cm and 48cm dominated catches, with no clear mode (mean length and weight of 40cm and 714g).

2.1.11.2. 280mm mesh size.

Information on length composition of the American plaice by-catch in Div. 3O is available only for April (Table XVI-B) from 114m to 141m depth.

Sampling data is base on a very small number of observations (1 sample, 15 fish measured), the lengths range was from 46cm till 64cm (mean length and weight of 56cm and 1916g).

2.1.12. Yellowtail flounder Div. 3N

Information on length composition of the yellowtail flounder in Div. 3N is available for July to November (Table XVII, Fig. 9), from 48m to 550m depth.

Lengths between 32cm and 38cm dominated catches, with a mode at 34cm (mean length and weight of 36cm and 496g).

2.1.13. Greenland halibut Div. 3L

Information on length composition of the Greenland halibut in Div. 3L is available from January to October, except May and August (Table XVIII, Fig. 14) from depths 690m to 1133m.

Lengths between 38cm and 44cm dominated catches, with a mode at 40cm (mean length and weight of 44cm and 837g).

2.1.14. Greenland halibut Div. 3M

Information on length composition of the Greenland halibut in Div. 3M is available from January to April, June and October (Table XIX, Fig. 15) from 720m to 1117m depth.

Lengths between 42cm and 50cm dominated catches, with a mode at 46cm (mean length and weight of 47cm and 1036g).

2.1.15. Greenland halibut Div. 3N

Information on length composition of the Greenland halibut in Div. 3N is available for April to October (Table XX, Fig. 16) from 680m to 1300m depth.

Lengths between 38cm and 46cm dominated catches, with a mode at 42cm (mean length and weight of 44.5cm and 917g).

2.1.16. Greenland halibut Div. 3O

Information on length composition of the Greenland halibut in Div. 3O is available only for April (Table XXI, Fig. 17) from 676m to 751m depth.

Sampling data is base on a small number of observations (1 sample, 113 fish measured), but indicate that lengths between 42cm and 48cm dominated catches, with a mode at 44cm (mean length and weight of 45cm and 869g).

2.1.17. Roughhead grenadier Div. 3L

Information on length composition of the roughhead grenadier catches in Div. 3L is available from February to October, except May and August (Table XXII, Fig. 18) from 710m to 1133m depth.

Anal lengths between 10cm and 13cm dominated catches, with a very clear mode at 12cm (mean length and weight of 13cm and 425g).

2.1.18. Roughhead grenadier Div. 3M

Information on length composition of the roughhead grenadier catches in Div. 3M is available from January to March, June and October (Table XXIII, Fig. 19) from 720m to 1117m depth.

Anal lengths between 12cm and 16cm dominated catches, with a mode at 13-14cm (mean length and weight of 15cm and 593g).

2.1.19. Roughhead grenadier Div. 3N

Information on length composition of the roughhead grenadier catches in Div. 3N is available for May to October (Table XXIV, Fig. 20) from 652m to 1300m depth.

Anal lengths between 10cm and 13cm dominated catches, with a clear mode at 12cm (mean length and weight of 12.7cm and 431g).

2.1.20. Roughhead grenadier Div. 3O

Information on length composition of the roughhead grenadier catches in Div. 3O is available only for April (Table XXV, Fig. 21) from 676m to 751m depth.

Sampling data is base on a small number of observations (1 sample, 170 fish measured), the anal lengths between 10cm and 13cm dominated catches, with a very clear mode at 12cm (mean length and weight of 12.6cm and 407g).

2.1.21. Witch flounder Div. 3L

Information on length composition of the witch flounder catches in Div. 3L is available from January to April and for July (Table XXVI, Fig. 22) from 710m to 1066m depth.

Lengths between 36cm and 44cm dominated catches, with a clear mode at 38cm (mean length and weight of 41cm and 477g).

2.1.22. Witch flounder Div. 3M

Information on length composition of the witch flounder catches in Div. 3M is available from January to March (Table XXVII, Fig. 23) from 769m to 1055m depth.

Lengths between 34cm and 44cm dominated catches, with a very clear mode at 40cm (mean length and weight of 41cm and 476g).

2.1.23. Witch flounder Div. 3N

Information on length composition of the witch flounder catches in Div. 3N is available for April to November (Table XXVIII, Fig. 24) from 69m to 1277m depth.

Lengths between 34cm and 44cm dominated catches, with a mode at 38cm (mean length and weight of 40cm and 497g).

2.1.24. Witch flounder Div. 3O

Information on length composition of the witch flounder catches in Div. 3O is available for April, May and from August to November (Table XXIX, Fig. 25) from 120m to 596m depth.

Lengths between 34cm and 42cm dominated catches, with a mode at 38cm (mean length and weight of 39cm and 471g).

2.1.25. Atlantic halibut Div. 3N

Information on length composition of the Atlantic halibut catches in Div. 3N is available from May to November, (Table XXX) from 195m to 1150m depth.

Sampling data is base on a very small number of observations (10 samples, 16 fish measured). The most abundant classes are at 58cm, 70cm and 80cm (mean length and weight of 71cm and 5415g).

2.1.26. Atlantic halibut Div. 3O

Information on length composition of the Atlantic halibut catches in Div. 3O is available for April, May and from August to November (Table XXXI) from 120m to 657m depth.

Sampling data is base on a small number of observations (19 samples, 97 fish measured), the length range was from 48cm till 162cm (mean length and weight of 91cm and 15780g).

2.1.27. White hake Div. 3N

Information on length composition of the white hake catches in Div. 3N is available for July and from August to November (Table XXXII, Fig. 26) from 63m to 450m depth.

Lengths between 41cm and 48cm dominated catches, with three modal classes at 42cm to 44cm (mean length and weight of 45cm and 969g).

2.1.28. White hake Div. 3O

Information on length composition of the white hake catches in Div. 3O is available for April, May, and from August to November (Table XXXIII, Fig. 27) from 143m to 821m depth.

Lengths between 42cm and 48cm dominated catches, with a mode at 46cm (mean length and weight of 47cm and 1170g).

2.1.29. Thorny skate Div. 3L

Information on length composition of the thorny skate catches in Div. 3L is available from February to October, except May and August (Table XXXIV, Fig. 30) from 716m to 1133m depth.

Lengths at 24cm, 26cm, 28cm and 30cm dominated catches (mean length of 29.5cm).

2.1.30. Thorny skate Div. 3M

Information on length composition of the thorny skate catches in Div. 3M is available for February, March and June (Table XXXV, Fig. 31) from 839m to 1117m depth.

Lengths at 26m and 30cm dominated catches (mean length of 30cm).

2.1.31. Thorny skate Div. 3N

Information on length composition of the thorny skate catches in Div. 3N is available for April to November (Table XXXVI, Fig. 32) from 48m to 1277m depth.

Lengths at 38cm and 40cm dominated catches (mean length of 34.5cm).

2.1.32. Thorny skate Div. 3O

2.1.32.1. Common mesh size (135mm).

Information on length composition of the thorny skate catches in Div. 3O is available for April, May and from August to November (Table XXXVII-A, Fig. 33) from 120m to 684m depth.

Lengths between 36cm and 42cm dominated catches, with a mode at 40 cm (mean length of 36cm).

2.1.32.2. 280 mm mesh size.

Information on length composition of the thorny skate catches in Div. 3O is available only for April (Table XXXVII-B, Fig. 34) from 114m to 141m depth.

Sampling data is base on a very small number of observations (1 sample, 100 fish measured), the lengths range was from 22cm till 57cm (mean length of 38cm).

2.1.33. Spinytail skate Div. 3L, 3M and 3N

In each Division sampling data is base on a small number of observations and the length ranges are very wide (from 17 till 88cm). Information is show in Tables XXXVIII to XL.

2.1.34. Monkfish Div. 3N

Information on length composition of the monkfish catches in Div. 3O is available from August to November, except September (Table XLI, Fig. 28) from 63m to 450m depth.

The most abundant length classes were between 44cm and 56cm (mean length of 53cm).

2.1.35. Monkfish Div. 3O

Information on length composition of the monkfish catches in Div. 3O is available for April, May and from August to November (Table XLII, Fig. 29) from 122m to 821m depth.

The most abundant length classes were between 44 and 55cm (mean length of 52cm).

3. Acknowledgements

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4. References

- ALPOIM, R., GODINHO, M. L., SANTOS, E. and ÁVILA de MELO, A. M. 1998. "Portuguese research Report for 1998". NAFO SCS Doc. 98/13 Ser. No N3025, 38p.
- ÁVILA de MELO, A. M., ALPOIM, R. 1995. "Portuguese Cod Fisheries in NAFO Divisions 3N and 3O, 1989-93". NAFO Sci. Coun. Studies 23: 65-84.
- ÁVILA de MELO, A. M., ALPOIM, R. 1996. "Greenland halibut deepwater fishery in Divisions 3L and 3N: an analysis of catch rate trends from Portuguese trawlers, 1988 -1995." NAFO SCR Doc. 96/33 Ser. No N2708, 16p.
- ALPOIM, 2004. "Length-Weight relationships of the Portuguese commercial catches in NAFO, 1998-2003". NAFO SCR Doc 04/40 Ser. No N4991.

TABLE I-A: PORTUGUESE NOMINAL TRAWL CATCHES (mt) IN NAFO AREA, 2003.

SPECIES	DIVISION					SUBAREA 3 2003	TOTAL 2003
	1F	2J	3L	3M	3N		
Cod			17.5	6.6	339.0	313.5	676.6
Redfish	1286.6	71.7	67.3	1091.2	242.2	6309.0	7709.7
American plaice			80.5	28.1	409.1	383.2	900.9
Yellowtail					266.1	21.0	287.1
Witch flounder			35.9	47.9	180.4	237.2	501.4
Greenland halibut			1776.9	659.4	1966.7	207.8	4610.8
Atlantic halibut			3.2	0.3	34.1	51.5	89.1
Roughhead grenadier			102.2	54.1	125.9	9.3	291.5
Anarhichas spp.			23.0	10.2	58.0	14.3	105.5
Haddock			0.2		11.9	118.5	130.6
Pollock					87.3	27.3	114.6
White hake					2211.5	1707.2	3918.7
Red hake			1.8		0.1		1.9
Capelin							
Skates			240.0	49.5	883.1	643.8	1816.4
Monkfish					19.4	136.7	156.1
Squid							
Shrimp							
Unidentified			3.5	3.2	3.0	3.5	13.2
TOTAL	1286.6	71.7	2352.0	1950.5	6837.8	10183.8	21324.1
							22682.4

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

SPECIES / YEAR	2003	2002	2001	2000	1999	1998	1997	1996
Cod	677	488	357	193	327	549	1546	1318
Redfish	7710	6344	5324	5743	6081	2368	1125	2152
American plaice	901	631	633	402	719	357	389	298
Yellowtail flounder	287	122	351	153	426	85		
Witch flounder	501	433	579	228	508	381	347	236
Greenland halibut	4611	4319	5026	4769	3995	3242	3343	3308
Atlantic halibut	89	46	44	29	51	30	17	12
Roughhead grenadier(1)	292	508	610	396	1299	1089	762	784
Anarhichas spp.	106	87	141	61	549	140	185	122
Haddock	131	78	23	13	10	6	39	
Pollock	115							
White hake (2)	3919	1969	273	41	77	18	56	124
Red hake	2							
Capelin								
Skates	1816	1361	880	666	2168	1105	904	788
Monkfish	156							
Squid						1		3
Shrimp		15	420	289	227	203	170	
Unidentified	13	43	41	3	117	40	116	22
TOTAL	21324	16443	14701	12985	16554	9614	9000	9167

TABLE I - B: cont.

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

(1) Reported as Roundnose grenadier in years before.

(2) Reported as Red hake in years before.

TABLE II - A : PORTUGUESE TRAWL EFFORT IN FISHING DAYS AND FISHING HOURS IN NAFO AREA IN 2003 .

MONTH	DIVISION								TOTAL		MONTH		
	1F DAYS	2J DAYS	3L DAYS	3M HOURS	3N DAYS	3N HOURS	3O DAYS	3O HOURS	SUBAREA 3 DAYS	SUBAREA 3 HOURS			
JAN.		41	256	34	447	32	103	14	167	121	974	JAN.	
FEB.		170	2110	41	322	9	29	24	287	244	2747	FEB.	
MAR.		85	1043	98	1202	34	109	44	526	261	2881	MAR.	
APR.		64	875	8	48	46	148	121	1446	239	2517	APR.	
MAY		34	462	4	34	59	745	104	1387	201	2628	MAY	
JUN.		3	40	2	52	60	906	28	308	93	1305	JUN.	
JUL.		8	102	3	54	91	1310	54	595	156	2061	JUL.	
AUG.	20		34	428	1	18	49	613	19	156	103	1215	AUG.
SEP.	27	5	11	121	11	197	72	843	39	456	133	1617	SEP.
OCT.	71		12	173	28	280	142	1184	101	1262	283	2899	OCT.
NOV.			15	216	17	170	149	1165	152	1373	333	2925	NOV.
DEC.			26	374	10	100	43	336	66	596	145	1407	DEC.
TOTAL	118	5	503	6201	257	2923	786	7491	766	8560	2312	25175	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				YEAR
	OT DAYS	GNS HOURS	OT DAYS	GNS NETS	
2003	2312	25175			2003
2002	1882	19902			2002
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 III: Portuguese trawl fishery cpue's and bycatch by month and division for 2003.

DIVISION	TARGET SPECIES	MONTH	DEPTH RANGE (m)		CPUE (ton/hour)	MAIN BYCATCH SPECIES	% BYCATCH (%)	WITCH FLOUNDER BYCATCH (%)	TOTAL BYCATCH (%)
			MIN.	MAX.					
3M	RED	JAN	728	762	0.077	GHL	47.6	0.0	60.5
3M	RED	FEB	842	859	0.178	GHL	36.2	16.5	70.0
3M	RED	MAR	865	976	0.060	GHL	29.5	6.4	80.0
3M	RED	APR	768	784	0.214	GHL	35.1	1.8	65.1
3O	RED	APR	333	751	0.280	COD	26.1	3.1	69.7
3O	RED	MAY	438	657	0.239	COD	29.0	1.3	60.3
3O	RED	AUG	138	571	0.136	HKW	26.2	2.8	79.3
3O	RED	OCT	147	500	0.453	HKW	15.5	3.5	48.8
3O	RED	NOV	122	454	0.377	PLA	15.0	1.4	48.8
3L	GHL	JAN	919	969	0.398	WIT	3.6	3.6	12.8
3L	GHL	FEB	690	1081	0.257	SKA	8.7	2.3	26.8
3L	GHL	MAR	716	1067	0.260	SKA	13.2	2.2	38.3
3L	GHL	APR	708	1055	0.270	SKA	13.2	2.1	39.9
3L	GHL	JUN	785	1200	0.137	RHG	15.2	0.0	22.3
3L	GHL	JUL	710	1005	0.205	RHG	14.0	1.3	26.7
3L	GHL	SEP	1080	1097	0.205	RHG	9.4	0.0	13.6
3L	GHL	OCT	809	1190	0.116	RHG	15.9	0.4	30.6
3M	GHL	JAN	720	1019	0.203	WIT	15.5	15.5	37.9
3M	GHL	FEB	842	1081	0.174	WIT	17.7	17.7	54.9
3M	GHL	MAR	769	1089	0.246	RHG	11.0	5.2	39.0
3M	GHL	APR	739	949	0.288	RED	18.8	2.3	51.1
3M	GHL	JUN	871	1135	0.155	RHG	2.8	0.0	4.8
3M	GHL	OCT	887	926	0.335	RHG	19.5	0.5	32.4
3N	GHL	APR	737	939	0.110	PLA	24.7	1.5	62.3
3N	GHL	MAY	659	1320	0.278	SKA	14.8	2.8	35.6
3N	GHL	JUN	652	1200	0.207	RHG	7.3	0.9	16.2
3N	GHL	JUL	440	1300	0.267	RHG	14.0	1.5	24.9
3N	GHL	AUG	650	1072	0.264	RHG	13.4	5.6	41.7
3N	GHL	SEP	791	1074	0.089	RHG	15.7	0.0	21.1
3N	GHL	OCT	730	1205	0.085	RHG	11.0	7.8	36.4
3N	GHL	NOV	780	1150	0.131	WIT	23.9	23.9	54.3
3O	GHL	MAY	1024	1081	0.197	DGX	23.0	0.0	30.2
3L	RHG	FEB	748	749	0.065	SKA	33.4	0.0	74.2
3L	RHG	MAR	732	1007	0.118	GHL	30.6	3.9	70.7
3L	RHG	APR	754	764	0.119	GHL	32.4	7.2	85.3
3L	RHG	OCT	896	968	0.035	GHL	44.8	2.5	65.4
3M	RHG	FEB	842	1081	0.051	GHL	38.9	14.6	74.3
3M	RHG	MAR	842	1003	0.067	GHL	28.3	18.4	88.3
3M	RHG	APR	875	924	0.069	GHL	41.3	10.2	71.1
3N	RHG	MAY	950	1036	0.050	GHL	39.8	3.6	77.8
3N	RHG	JUL	440	900	0.119	GHL	39.5	3.8	66.9
3N	RHG	AUG	833	980	0.089	GHL	46.0	7.9	68.3
3N	RHG	OCT	229	262	0.025	PLA	24.4	0.0	95.2
3O	RHG	APR	403	720	0.079	COD	23.5	2.1	87.0
3L	SKA	FEB	733	953	0.127	GHL	26.2	4.4	58.7
3L	SKA	MAR	732	1050	0.127	GHL	34.3	1.8	64.1
3L	SKA	APR	763	982	0.182	GHL	34.8	0.3	59.7
3L	SKA	OCT	809	936	0.083	GHL	38.7	1.4	69.3
3M	SKA	FEB	869	892	0.111	WIT	36.8	36.8	79.3
3M	SKA	MAR	842	1003	0.105	GHL	27.6	16.8	80.1
3M	SKA	APR	846	851	0.226	GHL	33.8	5.4	74.0
3N	SKA	APR	260	1018	0.419	RED	12.7	0.6	36.4
3N	SKA	MAY	950	1277	0.237	GHL	44.6	2.1	59.9
3N	SKA	JUL	193	875	0.183	COD	22.3	4.1	76.9
3N	SKA	AUG	143	995	0.237	RED	19.2	3.3	79.4
3N	SKA	OCT	147	850	0.054	PLA	21.7	2.2	83.3
3N	SKA	NOV	110	244	0.127	COD	19.1	2.5	84.9
3O	SKA	APR	352	593	0.149	COD	27.3	2.4	84.7
3O	SKA	MAY	457	582	0.042	COD	29.3	6.2	87.3
3O	SKA	AUG	138	560	0.167	HKW	25.7	2.4	79.4
3O	SKA	NOV	122	454	0.065	PLA	25.0	2.5	83.7

TABLE IV - A: GREENLAND HALIBUT TRAWL CATCH RATES, 1988-2003: mean annual cpue's (ton/h) corrected for the month, division and vessel of each observation.

	3L			3M			3N			3LMN		
	CPUE	ST.ERROR	C.V.									
1988	0.401	0.082	41.1							0.416	0.095	45.4
1989	0.373	0.048	39.0							0.371	0.058	46.6
1990	0.335	0.034	35.6	0.241			0.189			0.330	0.035	39.2
1991	0.178	0.024	30.8				0.177	0.033	32.2	0.177	0.018	28.3
1992	0.108	0.032	94.2				0.221	0.025	39.4	0.174	0.023	63.5
1993	0.080	0.037	66.0				0.179	0.018	34.2	0.148	0.019	49.1
1994	0.095	0.029	42.8				0.146	0.023	39.1	0.130	0.017	36.0
1995	0.163	0.025	43.4	0.173	0.011	14.1	0.154	0.024	40.6	0.165	0.015	40.1
1996	0.214	0.021	36.1	0.213	0.021	29.2	0.187	0.020	28.3	0.194	0.009	24.8
1997	0.224	0.018	26.1	0.262	0.026	28.5	0.173	0.004	3.3	0.214	0.016	33.4
1998	0.261	0.018	26.2	0.195	0.029	51.6	0.185	0.013	23.9	0.227	0.010	28.1
1999	0.299	0.023	24.0	0.302	0.024	23.6	0.233	0.020	25.7	0.281	0.017	33.0
2000	0.300	0.020	17.5	0.296	0.019	14.2	0.301	0.041	27.4	0.294	0.018	25.0
2001	0.240	0.027	29.6	0.227	0.007	8.5	0.206	0.014	15.0	0.223	0.012	22.7
2002	0.231	0.015	21.7	0.203	0.021	33.7	0.266	0.033	24.9	0.219	0.014	32.3
2003	0.236	0.023	30.6	0.188	0.027	41.0	0.215	0.025	28.1	0.214	0.015	34.6

TABLE IV - B: GREENLAND HALIBUT TRAWL CATCH RATES,
1988-2003: mean cpue's (ton/h) by division corrected for
the year, month and vessel of each observation.

	CPUE	ST.ERROR	C.V.
3L	0.227	0.009	34.6
3M	0.201	0.007	31.9
3N	0.201	0.007	31.9
3LMN	0.226	0.005	37.5

TABLE V: Intensity of the trawl sampling during 2003, by species, division and month.

SPECIES	DIV.	MONTH	Nº OF SAMPLES	Nº FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS	
						Nº	LENGTH RANGE (cm)
COD	3L	APR	1	2	6	2	55 - 73
COD	3N	APR	1	2	6	2	50 - 71
COD	3N	JUL	6	424	704	126	37 - 79
COD	3N	AUG	14	1802	2140	154	28 - 72
COD	3N	OCT	19	2034	3415	250	28 - 90
COD	3N	NOV	25	2714	4385	344	26 - 92
COD	3O	APR	26	3071	6093	337	33 - 96
COD	3O	MAY	4	490	1059	209	32 - 92
COD	3O	AUG	4	235	379	15	40 - 77
COD	3O	OCT	22	1560	2564	284	26 - 93
COD	3O	NOV	13	904	1377	224	23 - 75
REDFISH (<i>S. mentella</i>)	3L	JAN	1	80	38	64	24 - 36
REDFISH (<i>S. mentella</i>)	3L	FEB	21	1703	747	252	21 - 44
REDFISH (<i>S. mentella</i>)	3L	MAR	23	2442	952	290	21 - 64
REDFISH (<i>S. mentella</i>)	3L	APR	18	1902	807	310	21 - 44
REDFISH (<i>S. mentella</i>)	3L	JUN	1	41	19	-	-
REDFISH (<i>S. mentella</i>)	3L	JUL	2	196	100	-	-
REDFISH (<i>S. mentella</i>)	3M	JAN	4	320	138	126	22 - 45
REDFISH (<i>S. mentella</i>)	3M	FEB	5	471	187	133	21 - 39
REDFISH (<i>S. mentella</i>)	3M	MAR	29	2850	1179	271	21 - 43
REDFISH (<i>S. mentella</i>)	3M	APR	7	560	256	138	23 - 38
REDFISH (<i>S. mentella</i>)	3N	APR	4	438	190	169	19 - 39
REDFISH (<i>S. mentella</i>)	3N	MAY	3	480	223	-	-
REDFISH (<i>S. mentella</i>)	3N	JUN	7	565	270	120	23 - 42
REDFISH (<i>S. mentella</i>)	3N	JUL	17	2401	1852	151	22 - 43
REDFISH (<i>S. mentella</i>)	3N	AUG	11	2649	1025	-	-
REDFISH (<i>S. mentella</i>)	3N	OCT	6	911	265	126	22 - 43
REDFISH (<i>S. mentella</i>)	3N	NOV	16	3851	953	289	17 - 44
REDFISH (<i>S. mentella</i>)	3O	APR	21	6344	1854	-	-
REDFISH (<i>S. mentella</i>)	3O	MAY	4	1368	376	-	-
REDFISH (<i>S. mentella</i>)	3O	AUG	1	199	47	-	-
REDFISH (<i>S. mentella</i>)	3O	OCT	2	333	78	61	22 - 39
REDFISH (<i>S. mentella</i>)	3O	NOV	9	1611	356	68	19 - 32
REDFISH (<i>S. marinus</i>)	3N	AUG	2	466	227	-	-
AMERICAN PLAICE	3L	FEB	6	406	242	140	28 - 49
AMERICAN PLAICE	3L	MAR	18	1236	792	237	26 - 55
AMERICAN PLAICE	3L	APR	10	773	476	193	20 - 53
AMERICAN PLAICE	3M	FEB	2	112	96	-	-
AMERICAN PLAICE	3M	MAR	18	967	698	105	33 - 62
AMERICAN PLAICE	3N	APR	6	508	328	108	26 - 59
AMERICAN PLAICE	3N	MAY	4	384	264	65	24 - 56
AMERICAN PLAICE	3N	JUL	6	1134	700	179	21 - 60
AMERICAN PLAICE	3N	AUG	13	3630	2508	151	20 - 62
AMERICAN PLAICE	3N	OCT	19	2873	2051	185	19 - 66
AMERICAN PLAICE	3N	NOV	21	5236	3552	279	10 - 66
AMERICAN PLAICE	3O	APR	27	4652	3154	401	6 - 63
AMERICAN PLAICE	3O	MAY	4	530	391	283	22 - 65
AMERICAN PLAICE	3O	AUG	4	711	457	58	25 - 65
AMERICAN PLAICE	3O	OCT	19	1953	1708	226	18 - 63
AMERICAN PLAICE	3O	NOV	12	1255	923	230	19 - 71
YELLOWTAIL FLOUNDER	3N	JUL	4	563	233	50	29 - 42
YELLOWTAIL FLOUNDER	3N	AUG	2	665	274	-	-
YELLOWTAIL FLOUNDER	3N	OCT	6	1276	627	74	29 - 47
YELLOWTAIL FLOUNDER	3N	NOV	14	3459	1509	176	29 - 51

TABLE V: count.

SPECIES	DIV.	MONTH	Nº OF SAMPLES	Nº FISH MEASURED	SAMPLING WEIGHT(Kg)	Nº	OTOLITHS LENGTH RANGE (cm)
GREENLAND HALIBUT	3L	JAN	2	160	126	85	33 - 55
GREENLAND HALIBUT	3L	FEB	27	2119	1778	225	28 - 74
GREENLAND HALIBUT	3L	MAR	31	3842	3107	435	28 - 89
GREENLAND HALIBUT	3L	APR	22	2562	2085	403	28 - 80
GREENLAND HALIBUT	3L	JUN	4	779	716	123	33 - 80
GREENLAND HALIBUT	3L	JUL	7	1580	1256	162	28 - 78
GREENLAND HALIBUT	3L	SEP	1	86	65	86	26 - 56
GREENLAND HALIBUT	3L	OCT	4	289	373	268	33 - 87
GREENLAND HALIBUT	3M	JAN	9	720	692	143	32 - 68
GREENLAND HALIBUT	3M	FEB	8	862	775	129	32 - 58
GREENLAND HALIBUT	3M	MAR	39	4715	4205	410	32 - 84
GREENLAND HALIBUT	3M	APR	7	560	441	139	31 - 66
GREENLAND HALIBUT	3M	JUN	1	82	174	82	36 - 87
GREENLAND HALIBUT	3M	OCT	1	80	89	57	40 - 63
GREENLAND HALIBUT	3N	APR	2	240	183	66	24 - 68
GREENLAND HALIBUT	3N	MAY	5	828	629	102	30 - 82
GREENLAND HALIBUT	3N	JUN	9	1331	1172	359	22 - 82
GREENLAND HALIBUT	3N	JUL	25	6475	5733	458	21 - 85
GREENLAND HALIBUT	3N	AUG	8	2036	1619	-	-
GREENLAND HALIBUT	3N	SEP	2	226	164	51	34 - 62
GREENLAND HALIBUT	3N	OCT	3	402	451	103	38 - 94
GREENLAND HALIBUT	3O	APR	1	113	86	-	-
ROUGHHEAD GRENADIER	3L	FEB	2	368	134	-	-
ROUGHHEAD GRENADIER	3L	MAR	14	2409	988	50	7.5 - 17
ROUGHHEAD GRENADIER	3L	APR	7	1159	428	52	4.5 - 22.5
ROUGHHEAD GRENADIER	3L	JUN	4	539	269	117	7 - 28
ROUGHHEAD GRENADIER	3L	JUL	7	1378	647	136	6.5 - 26
ROUGHHEAD GRENADIER	3L	SEP	1	50	47	50	7 - 29
ROUGHHEAD GRENADIER	3L	OCT	3	188	227	188	7 - 29
ROUGHHEAD GRENADIER	3M	JAN	3	240	135	94	10.5 - 27
ROUGHHEAD GRENADIER	3M	FEB	2	233	102	-	-
ROUGHHEAD GRENADIER	3M	MAR	23	2866	1262	316	5 - 27
ROUGHHEAD GRENADIER	3M	JUN	1	50	23	50	7 - 25
ROUGHHEAD GRENADIER	3M	OCT	1	80	74	63	13.5 - 28.5
ROUGHHEAD GRENADIER	3N	MAY	4	751	293	52	5.5 - 23.5
ROUGHHEAD GRENADIER	3N	JUN	9	1471	707	262	4.5 - 28.5
ROUGHHEAD GRENADIER	3N	JUL	25	6129	2920	346	4 - 28.5
ROUGHHEAD GRENADIER	3N	AUG	6	1241	478	-	-
ROUGHHEAD GRENADIER	3N	SEP	2	252	107	21	9 - 26.5
ROUGHHEAD GRENADIER	3N	OCT	3	243	176	103	5 - 28.5
ROUGHHEAD GRENADIER	3O	APR	1	170	67	-	-
WITCH FLOUNDER	3L	JAN	1	80	35	-	-
WITCH FLOUNDER	3L	FEB	3	196	93	36	27 - 54
WITCH FLOUNDER	3L	MAR	11	772	340	107	27 - 52
WITCH FLOUNDER	3L	APR	6	315	128	-	-
WITCH FLOUNDER	3L	JUL	6	441	196	-	-
WITCH FLOUNDER	3M	JAN	3	240	122	-	-
WITCH FLOUNDER	3M	FEB	5	403	161	-	-
WITCH FLOUNDER	3M	MAR	17	762	360	-	-
WITCH FLOUNDER	3N	APR	1	35	12	-	-
WITCH FLOUNDER	3N	MAY	5	402	201	55	32 - 55
WITCH FLOUNDER	3N	JUN	7	247	146	99	31 - 55
WITCH FLOUNDER	3N	JUL	20	1400	647	132	24 - 52
WITCH FLOUNDER	3N	AUG	14	1957	862	-	-
WITCH FLOUNDER	3N	OCT	15	1230	616	54	25 - 57
WITCH FLOUNDER	3N	NOV	13	942	425	-	-
WITCH FLOUNDER	3O	APR	21	2528	1081	123	27 - 59
WITCH FLOUNDER	3O	MAY	4	494	220	100	27 - 58
WITCH FLOUNDER	3O	AUG	3	222	103	55	28 - 47
WITCH FLOUNDER	3O	OCT	16	1327	617	-	-
WITCH FLOUNDER	3O	NOV	10	750	303	-	-

TABLE V: count.

SPECIES	DIV.	MONTH	Nº OF SAMPLES	Nº FISH MEASURED	SAMPLING WEIGHT(Kg)	Nº	OTOLITHS LENGTH RANGE (cm)
ATLANTIC HALIBUT	3N	MAY	1	1	6	1	80 - 80
ATLANTIC HALIBUT	3N	JUN	3	5	77	5	57 - 132
ATLANTIC HALIBUT	3N	JUL	3	6	57	2	58 - 118
ATLANTIC HALIBUT	3N	AUG	1	2	11	2	65 - 82
ATLANTIC HALIBUT	3N	OCT	1	1	7	1	77 - 77
ATLANTIC HALIBUT	3N	NOV	1	1	5	1	70 - 70
ATLANTIC HALIBUT	3O	APR	7	56	780	7	71 - 124
ATLANTIC HALIBUT	3O	MAY	3	14	209	5	75 - 128
ATLANTIC HALIBUT	3O	AUG	1	3	20	3	69 - 79
ATLANTIC HALIBUT	3O	OCT	6	18	112	9	53 - 82
ATLANTIC HALIBUT	3O	NOV	2	6	50	6	67 - 91
WHITE HAKE	3N	JUL	1	100	75	-	-
WHITE HAKE	3N	AUG	10	1014	908	59	29 - 66
WHITE HAKE	3N	OCT	9	743	780	-	-
WHITE HAKE	3N	NOV	8	549	534	54	36 - 74
WHITE HAKE	3O	APR	21	1918	2271	52	27 - 62
WHITE HAKE	3O	MAY	4	331	582	62	31 - 72
WHITE HAKE	3O	AUG	4	394	325	50	34 - 65
WHITE HAKE	3O	OCT	19	2036	2377	213	16 - 87
WHITE HAKE	3O	NOV	12	915	982	115	29 - 79
THORNY SKATE	3L	FEB	2	53	114	-	-
THORNY SKATE	3L	MAR	15	478	782	-	-
THORNY SKATE	3L	APR	7	262	516	-	-
THORNY SKATE	3L	JUN	4	78	204	-	-
THORNY SKATE	3L	JUL	6	172	293	-	-
THORNY SKATE	3L	SEP	1	21	39	-	-
THORNY SKATE	3L	OCT	3	55	87	-	-
THORNY SKATE	3M	FEB	1	16	48	-	-
THORNY SKATE	3M	MAR	15	338	649	-	-
THORNY SKATE	3M	JUN	1	12	22	-	-
THORNY SKATE	3N	APR	2	87	315	-	-
THORNY SKATE	3N	MAY	4	213	429	-	-
THORNY SKATE	3N	JUN	9	187	434	-	-
THORNY SKATE	3N	JUL	25	764	1738	-	-
THORNY SKATE	3N	AUG	15	548	1234	-	-
THORNY SKATE	3N	SEP	1	14	26	-	-
THORNY SKATE	3N	OCT	17	410	1313	-	-
THORNY SKATE	3N	NOV	15	343	1191	-	-
THORNY SKATE	3O	APR	22	771	2700	-	-
THORNY SKATE	3O	MAY	4	143	410	-	-
THORNY SKATE	3O	AUG	4	182	314	-	-
THORNY SKATE	3O	OCT	18	490	1753	-	-
THORNY SKATE	3O	NOV	8	183	613	-	-
SPINYTAIL SKATE	3L	MAR	2	17	59	-	-
SPINYTAIL SKATE	3L	APR	3	37	121	-	-
SPINYTAIL SKATE	3L	JUN	3	20	82	-	-
SPINYTAIL SKATE	3L	JUL	6	49	216	-	-
SPINYTAIL SKATE	3L	SEP	1	5	6	-	-
SPINYTAIL SKATE	3L	OCT	3	22	45	-	-
SPINYTAIL SKATE	3M	MAR	13	171	494	-	-
SPINYTAIL SKATE	3M	JUN	1	17	52	-	-
SPINYTAIL SKATE	3N	APR	1	27	156	-	-
SPINYTAIL SKATE	3N	MAY	1	12	66	-	-
SPINYTAIL SKATE	3N	JUN	7	53	310	-	-
SPINYTAIL SKATE	3N	JUL	23	156	934	-	-
SPINYTAIL SKATE	3N	AUG	7	47	312	-	-
SPINYTAIL SKATE	3N	SEP	2	8	81	-	-
SPINYTAIL SKATE	3N	OCT	3	22	70	-	-
SPINYTAIL SKATE	3O	AUG	1	9	89	-	-
MONKFISH	3N	AUG	6	59	249	-	-
MONKFISH	3N	OCT	9	91	347	-	-
MONKFISH	3N	NOV	7	60	285	-	-
MONKFISH	3O	APR	20	258	1008	-	-
MONKFISH	3O	MAY	4	60	217	-	-
MONKFISH	3O	AUG	4	75	307	-	-
MONKFISH	3O	OCT	16	173	675	-	-
MONKFISH	3O	NOV	11	84	414	-	-

TABLE VI: COD, DIV. 3N, 2003: length composition of the trawl catches.

LENGTH GROUP	JUL	AUG	OCT	NOV	3rd Q.	4th Q.	YEAR	LENGTH GROUP
24				1.0		0.5	0.3	24
27		2.6	0.7	5.1	2.4	3.1	2.8	27
30		5.1	0.2	7.1	4.8	3.9	4.2	30
33		12.0	1.3	11.7	11.2	6.9	8.5	33
36	17.5	27.9	11.8	20.9	27.2	16.7	20.6	36
39	45.0	92.2	43.6	50.6	89.0	47.4	63.0	39
42	60.7	179.5	77.0	97.0	171.4	87.8	119.2	42
45	70.4	181.3	95.1	127.6	173.8	112.8	135.6	45
48	168.1	167.7	169.6	154.1	167.8	161.2	163.7	48
51	211.4	172.1	168.4	152.9	174.7	160.0	165.5	51
54	146.1	77.7	165.2	160.9	82.3	162.8	132.6	54
57	136.6	44.2	113.1	108.6	50.4	110.6	88.1	57
60	81.2	25.3	89.7	47.2	29.1	66.6	52.5	60
63	37.9	6.7	39.6	30.3	8.8	34.6	24.9	63
66	2.1	3.8	13.9	18.6	3.7	16.5	11.7	66
69	12.6	0.8	6.3	4.1	1.6	5.1	3.8	69
72	1.4	1.2	3.7	1.3	1.3	2.4	2.0	72
75	4.5		0.2	0.8	0.3	0.5	0.4	75
78	4.5		0.7		0.3	0.3	0.3	78
81				0.1		0.1	0.03	81
84								84
87								87
90			0.2	0.1		0.1	0.1	90
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000
No. SAMPLES	6	14	19	25	20	44	65	
SAMPLING WEIGHT(kg)	704	2140	3415	4385	2844	7800	10651	
No. F.MEASURED	424	1802	2034	2714	2226	4748	6976	
MEAN LENGTH(cm)	53.2	48.3	52.9	51.3	48.6	52.0	50.7	
MEAN WEIGHT (g)	1771	1309	1736	1600	1341	1662	1542	
DEPTH RANGE (m)	48/285	59/289	120/850	69/644	48/289	69/850	48/850	

TABLE VII: COD, DIV. 3O, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	AUG	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
21					1.8			0.6	0.1	21
24				0.2	7.3			2.5	0.4	24
27				1.9	15.0			6.2	1.1	27
30	1.0	2.9		2.7	55.6	1.4		19.8	4.6	30
33	6.7		24.7	4.9	36.2	5.4	24.7	15.0	8.2	33
36	12.7	8.5	24.7	12.4	36.5	11.9	24.7	20.2	14.1	36
39	14.2	6.3	58.0	26.6	79.1	12.7	58.0	43.6	20.7	39
42	34.6	31.9	201.0	80.3	114.8	34.1	201.0	91.5	53.4	42
45	74.8	59.0	103.8	123.8	109.0	71.8	103.8	119.0	82.0	45
48	141.4	142.4	101.9	115.4	139.3	141.6	101.9	123.1	136.1	48
51	191.5	206.6	215.9	87.2	116.8	194.4	215.9	96.8	178.1	51
54	154.4	124.4	117.3	153.1	116.9	148.7	117.3	141.4	145.7	54
57	123.9	156.7	103.2	150.5	66.8	130.2	103.2	123.5	127.5	57
60	94.7	62.9	26.3	77.3	34.2	88.6	26.3	63.4	80.7	60
63	43.5	42.0	12.7	83.1	30.8	43.2	12.7	66.2	45.7	63
66	27.4	41.0	7.2	53.8	20.3	30.0	7.2	43.0	31.1	66
69	34.0	38.4	3.0	12.6	18.1	34.9	3.0	14.4	29.5	69
72	21.5	38.9		9.5	0.8	24.8		6.7	20.2	72
75	12.2	14.8	0.3	2.6	0.4	12.7	0.3	1.9	10.1	75
78	3.9	12.5		1.2		5.6		0.8	4.4	78
81	4.3	1.0			3.7			2.8	81	
84	1.6	5.4		0.1		2.3		0.1	1.8	84
87	1.0	3.6		0.3		1.5		0.2	1.2	87
90	0.3	1.0			0.4			0.3	90	
93	0.3			0.3	0.3		0.2	0.2	93	
96	0.1				0.1			0.04	96	
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
No. SAMPLES	26	4	4	22	13	30	4	35	69	
SAMPLING WEIGHT(kg)	6093	1059	379	2564	1377	7152	379	3940	11471	
No. F.MEASURED	3071	490	235	1560	904	3561	235	2464	6260	
MEAN LENGTH(cm)	55.5	56.7	49.8	54.4	48.5	55.7	49.8	52.5	54.8	
MEAN WEIGHT (g)	2061	2223	1449	1933	1422	2092	1449	1768	1999	
DEPTH RANGE (m)	320/660	388/579	122/216	140/460	122/421	320/660	122/216	122/460	122/660	

TABLE VIII: REDFISH (*S. mentella*), DIV. 3L, 2003: length composition of the trawl catches.

LENGTH GROUP	JAN	FEB	MAR	APR	JUN	JUL	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
21		1.1	1.3	1.3			1.2	1.3		1.2	21
22		1.0	2.8	4.7			2.1	4.6		3.0	22
23		7.3	12.7	10.4			10.8	10.2		10.5	23
24	12.5	40.4	41.6	36.5			40.9	36.0		38.7	24
25	37.5	51.3	102.4	69.0	73.2		84.9	69.1		78.2	25
26	50.0	59.3	106.6	85.4	24.4	4.9	90.5	84.6	4.9	87.4	26
27	100.0	85.6	104.4	88.5	73.2	34.9	98.2	88.3	34.9	93.9	27
28	75.0	84.1	92.6	78.8	48.8	36.2	89.7	78.4	36.2	84.9	28
29	75.0	96.7	82.5	81.1	122.0	39.8	87.1	81.6	39.8	84.6	29
30	275.0	83.5	104.2	90.6	170.7	96.2	99.2	91.6	96.2	96.3	30
31	125.0	102.3	90.7	94.0	170.7	93.2	94.9	94.9	93.2	94.9	31
32	50.0	94.8	82.0	96.9	122.0	209.6	85.8	97.2	209.6	91.3	32
33	87.5	94.4	59.5	87.9	97.6	264.1	71.2	88.0	264.1	79.4	33
34	62.5	99.9	41.3	65.6	73.2	130.0	60.7	65.7	130.0	63.3	34
35	37.5	44.5	36.6	65.0	24.4	47.2	39.2	64.5	47.2	48.6	35
36	12.5	27.9	18.7	22.5		14.7	21.7	22.2	14.7	21.8	36
37		13.8	9.1	15.7		19.6	10.5	15.5	19.6	12.5	37
38		8.9	2.2	3.0		9.8	4.3	3.0	9.8	3.9	38
39		1.0	1.3				1.2			0.7	39
40		1.2	1.5	0.2			1.4	0.2		0.9	40
41			2.5	0.5			1.7	0.5		1.2	41
42			1.3	1.3			0.9	1.3		1.0	42
43		0.9		0.9			0.3	0.9		0.5	43
44		0.2	0.9	0.4			0.7	0.4		0.6	44
//										//	
//										//	
64			1.5				1.0			0.6	64
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	21	23	18	1	2	45	19	2	66	
SAMPLING WEIGHT(kg)	38	747	952	807	19	100	1738	826	100	2664	
No. F.MEASURED	80	1703	2442	1902	41	196	4225	1943	196	6364	
MEAN LENGTH(cm)	30.5	30.7	29.7	30.4	30.7	32.6	30.1	30.4	32.6	30.2	
MEAN WEIGHT (g)	422	438	400	425	429	512	413	425	512	418	
DEPTH RANGE (m)	919/930	690/1081	716/1067	714/1038	810/965	875/962	690/1081	714/1038	875/962	690/1081	

TABLE IX: REDFISH (*S. mentella*), DIV. 3M, 2003: length composition of the trawl catches.

LENGTH GROUP	JAN	FEB	MAR	APR	1st Q.	2nd Q.	YEAR	LENGTH GROUP
21		1.2	0.6		0.7		0.5	21
22		4.2		1.4		1.3		1.1 22
23		4.2	0.8	2.6	3.9	2.3	3.9	2.6 23
24		12.7	5.2	10.2	35.9	9.2	35.9	14.7 24
25		41.7	37.0	32.1	89.5	34.0	89.5	45.4 25
26		71.1	81.4	56.5	64.0	63.6	64.0	63.7 26
27		119.9	105.6	88.3	80.2	95.0	80.2	92.0 27
28		103.7	123.9	95.5	51.7	102.9	51.7	92.4 28
29		178.2	178.7	116.9	67.7	136.6	67.7	122.5 29
30		113.1	153.4	136.7	82.5	138.7	82.5	127.2 30
31		165.5	141.0	81.3	90.3	102.3	90.3	99.9 31
32		58.9	56.5	114.0	63.2	95.8	63.2	89.1 32
33		19.1	36.2	100.0	120.4	78.2	120.4	86.9 33
34		33.6	22.8	62.0	112.2	50.4	112.2	63.0 34
35		43.4	23.8	54.9	86.9	46.6	86.9	54.9 35
36		21.0	8.2	27.5	34.5	22.4	34.5	24.9 36
37		2.3	19.5	9.3	5.0	11.2	5.0	9.9 37
38		1.1		4.6	11.8	3.3	11.8	5.0 38
39			5.0	3.0		3.2	2.6	39
40				0.8		0.5	0.4	40
41				0.2		0.1	0.1	41
42				0.2		0.1	0.1	42
43				1.5		1.0	0.8	43
44								44
45		6.2			0.5		0.4	45
TOTAL	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	4	5	29	7	38	7	45	
SAMPLING WEIGHT(kg)	138	187	1179	256	1504	256	1761	
No. F.MEASURED	320	471	2850	560	3641	560	4201	
MEAN LENGTH(cm)	30.1	30.0	30.9	30.9	30.6	30.9	30.7	
MEAN WEIGHT (g)	410	406	442	447	431	447	434	
DEPTH RANGE (m)	728/958	843/972	769/1034	739/949	728/1034	739/949	728/1034	

TABLE X: REDFISH (*S. mentella*), DIV. 3N, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	JUN	JUL	AUG	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
13						1.0				0.2	0.1	13
14							2.7			2.6	1.7	14
15						2.0	5.1			4.7	3.1	15
16						2.9				2.7	24.6	16
17					1.0	4.7	13.5		0.9	11.9	8.1	17
18					3.1	7.7	28.3		2.7	24.6	17.0	18
19	0.4				12.3	20.7	53.5	0.3	10.7	47.7	34.4	19
20	20.7				32.8	45.0	80.4	14.5	28.6	74.0	57.6	20
21	62.2				64.2	104.5	96.3	43.5	55.9	97.8	82.7	21
22	10.4			0.8	91.2	122.1	120.0	7.2	79.5	120.4	101.3	22
23	54.3		2.6	1.5	92.1	96.4	119.0	38.2	80.5	115.0	100.2	23
24	74.6	4.6	15.9	8.9	74.3	80.3	94.8	54.7	65.9	92.2	82.5	24
25	96.7	8.1	16.7	34.5	66.1	47.7	62.1	70.8	62.0	59.5	61.0	25
26	194.0	32.5	35.6	42.3	56.4	81.0	59.0	145.6	54.6	62.9	66.7	26
27	82.0	50.6	34.0	40.5	54.3	92.0	66.3	70.8	52.5	70.9	66.0	27
28	95.7	77.5	27.4	55.9	63.1	59.2	54.7	85.0	62.1	55.5	59.4	28
29	86.4	77.7	37.2	75.0	51.5	43.0	45.5	79.5	54.6	45.0	50.1	29
30	14.9	117.7	53.7	88.1	51.8	46.4	28.7	39.2	56.5	31.9	39.0	30
31	98.3	96.2	95.2	97.6	47.5	38.9	23.2	97.5	53.9	26.0	38.6	31
32	12.7	156.1	148.7	153.8	48.2	3.8	10.5	55.2	61.8	9.3	26.6	32
33	37.8	124.6	221.2	171.5	62.8	22.1	14.7	74.2	76.8	16.0	36.4	33
34	39.9	98.2	127.9	109.1	43.0	25.0	6.9	60.6	51.5	10.1	24.8	34
35	6.5	62.8	100.3	71.1	35.3	7.9	4.2	27.4	39.9	4.9	15.8	35
36	5.1	21.7	42.5	24.4	18.3	16.2	3.7	12.3	19.1	5.9	9.9	36
37	4.6	41.3	30.7	9.5	10.9	8.8	2.5	14.6	10.7	3.6	6.3	37
38	0.3	10.9	9.2	7.6	7.5	7.6	1.5	3.3	7.5	2.6	4.0	38
39	2.2	8.7	0.9	4.9	4.6	2.5	2.8	3.3	4.7	2.7	3.3	39
40	0.1	8.7		1.7	4.3	2.8	0.1	1.8	4.0	0.6	1.6	40
41	0.1	2.2			1.3			0.5	1.1		0.3	41
42			0.6	0.1	1.3	5.1		0.1	1.2	0.9	0.9	42
43				0.9	0.3	2.5			0.3	0.5	0.4	43
44					0.4		0.04		0.3	0.03	0.1	44
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
No. SAMPLES	4	3	7	17	11	6	16	14	28	22	64	
SAMPLING WEIGHT(kg)	190	223	270	1852	1025	265	953	684	2877	1218	4778	
No. F.MEASURED	438	480	565	2401	2649	911	3851	1483	5050	4762	11295	
MEAN LENGTH(cm)	27.5	32.1	32.6	31.8	27.7	26.1	24.6	29.0	28.3	24.8	26.1	
MEAN WEIGHT (g)	317	495	516	481	339	284	231	373	358	241	281	
DEPTH RANGE (m)	437/1066	750/983	680/932	200/1200	63/935	154/950	117/644	437/1066	63/1200	117/950	63/1200	

TABLE XI: REDFISH (*S. mentella*), DIV. 3O, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	AUG	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
15	0.4		5.0		1.3	0.3	5.0	0.8	0.7	15
16	2.0	1.6	10.1	1.8	2.2	1.9	10.1	2.0	2.2	16
17	3.8	3.8	25.1	9.0	5.7	3.8	25.1	7.0	5.9	17
18	7.6	8.6	55.3	12.6	9.1	7.8	55.3	10.5	10.5	18
19	19.2	14.5	55.3	25.2	35.7	18.5	55.3	31.5	25.7	19
20	42.4	51.8	120.6	54.1	89.6	43.8	120.6	75.4	61.1	20
21	87.7	104.9	70.4	108.1	144.8	90.3	70.4	130.1	108.7	21
22	127.2	181.1	110.6	113.1	158.0	135.4	110.6	140.1	136.9	22
23	121.1	149.5	155.8	127.5	144.9	125.4	155.8	138.0	132.3	23
24	87.2	113.4	135.7	67.8	111.0	91.2	135.7	93.8	93.7	24
25	76.2	76.8	85.4	55.6	66.4	76.3	85.4	62.1	69.8	25
26	56.2	32.9	30.2	61.6	36.4	52.6	30.2	46.4	49.0	26
27	51.4	18.7	45.2	151.8	33.4	46.4	45.2	80.7	62.7	27
28	48.4	35.7	30.2	42.6	126.3	46.4	30.2	92.9	68.1	28
29	56.2	39.5	30.2	76.6	4.6	53.6	30.2	33.3	43.3	29
30	60.6	40.0	15.1	37.6	3.2	57.4	15.1	16.9	36.9	30
31	43.8	29.6	10.1	8.6	12.2	41.7	10.1	10.7	26.0	31
32	32.5	36.9	5.0	3.6	11.6	33.2	5.0	8.4	20.6	32
33	31.4	31.2	5.0	15.4	1.1	31.4	5.0	6.8	18.9	33
34	15.8	13.4			1.4	15.4		0.8	8.0	34
35	11.6	7.3		6.8	0.4	11.0		3.0	6.9	35
36	5.3	3.7		6.8	0.5	5.1		3.0	4.0	36
37	3.6	3.7			0.2	3.6		0.1	1.8	37
38	3.1	1.0		6.8	0.1	2.8		2.8	2.7	38
39	2.5	0.5		6.8		2.2		2.7	2.4	39
40	1.8					1.6			0.8	40
41	0.7					0.6			0.3	41
42	0.2					0.1			0.1	42
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
No. SAMPLES	21	4	1	2	9	25	1	11	37	
SAMPLING WEIGHT(kg)	1854	376	47	78	356	2230	47	434	2711	
No. F.MEASURED	6344	1368	199	333	1611	7712	199	1944	9855	
MEAN LENGTH(cm)	26.1	25.2	23.3	25.3	23.9	25.9	23.3	24.5	25.2	
MEAN WEIGHT (g)	281	259	214	263	227	278	214	241	259	
DEPTH RANGE (m)	365/821	412/657	495/571	170/378	145/454	365/821	495/571	145/454	145/821	

TABLE XII: REDFISH (*S. marinus*), DIV. 3N, 2003:
length composition of the trawl catches.

LENGTH GROUP	AUG =YEAR	LENGTH GROUP
20	1.8	20
21		21
22	1.8	22
23	1.8	23
24	13.7	24
25	19.2	25
26	22.0	26
27	44.9	27
28	55.2	28
29	58.1	29
30	96.2	30
31	96.5	31
32	116.4	32
33	96.4	33
34	81.7	34
35	103.6	35
36	75.0	36
37	41.1	37
38	35.8	38
39	23.1	39
40	11.9	40
41	1.8	41
42	1.8	42
TOTAL	1000	
No. SAMPLES	2	
SAMPLING WEIGHT(kg)	227	
No. F.MEASURED	466	
MEAN LENGTH(cm)	32.7	
MEAN WEIGHT (g)	513	
DEPTH RANGE (m)	206/289	

TABLE XIII: AMERICAN PLAICE, DIV. 3L, 2003: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	1st Q.	2nd Q.	YEAR	LENGTH GROUP
20			0.4		0.4	0.1	20
22			1.3		1.3	0.4	22
24		1.0	1.3	0.6	1.3	0.8	24
26		5.0	0.6	2.7	0.6	2.0	26
28	4.7	16.8	5.0	11.3	5.0	9.2	28
30	8.3	52.0	19.1	32.2	19.1	27.7	30
32	77.1	57.3	36.0	66.3	36.0	55.9	32
34	218.2	81.4	59.0	143.4	59.0	114.6	34
36	184.2	121.0	177.5	149.7	177.5	159.2	36
38	137.7	189.6	155.8	166.1	155.8	162.6	38
40	189.4	172.9	209.1	180.4	209.1	190.2	40
42	115.9	148.6	138.7	133.8	138.7	135.5	42
44	47.0	66.4	141.8	57.7	141.8	86.4	44
46	12.0	61.4	27.2	39.0	27.2	35.0	46
48	5.2	5.6	14.6	5.4	14.6	8.5	48
50	0.1	13.2	10.9	7.3	10.9	8.5	50
52		1.4	1.4	0.8	1.4	1.0	52
54		6.3	0.1	3.5	0.1	2.3	54
56		0.2		0.1		0.1	56
TOTAL	1000	1000	1000	1000	1000	1000	
No. SAMPLES	6	18	10	24	10	34	
SAMPLING WEIGHT(kg)	242	792	476	1033	476	1509	
No. F.MEASURED	406	1236	773	1642	773	2415	
MEAN LENGTH(cm)	38.5	39.6	40.3	39.1	40.3	39.5	
MEAN WEIGHT (g)	557	631	657	598	657	618	
DEPTH RANGE (m)	748/1008	716/1066	830/1040	716/1066	830/1040	716/1066	

TABLE XIV: AMERICAN PLAICE, DIV. 3M, 2003:
length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	1st Q. =YEAR	LENGTH GROUP
26		0.2	0.2	26
28		0.8	0.8	28
30		3.5	3.4	30
32	18.1	17.9	17.9	32
34	66.6	20.2	21.6	34
36	77.1	78.3	78.2	36
38	99.9	110.6	110.3	38
40	69.5	186.4	182.9	40
42	96.4	163.0	161.0	42
44	119.2	37.7	40.2	44
46	182.9	114.1	116.2	46
48	128.0	77.9	79.4	48
50	98.2	108.1	107.8	50
52	18.1	51.4	50.4	52
54	25.7	21.6	21.7	54
56		1.3	1.2	56
58				58
60				60
62		7.1	6.9	62
TOTAL	1000	1000	1000	
No. SAMPLES	2	18	20	
SAMPLING WEIGHT(kg)	96	698	795	
No. F.MEASURED	112	967	1079	
MEAN LENGTH(cm)	44.3	44.1	44.1	
MEAN WEIGHT(g)	913	905	905	
DEPTH RANGE (m)	884/1055	839/1034	839/1055	

TABLE XV: AMERICAN PLAICE, DIV. 3N, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	JUL	AUG	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
10						0.2			0.2	0.1	10
12											12
14						0.2			0.1	0.1	14
16						0.2			0.1	0.1	16
18					0.4	0.4			0.4	0.2	18
20			1.0	1.1		1.2		1.1	0.8	0.9	20
22	0.3		10.8	1.8	0.9	4.4	0.1	2.7	3.2	2.9	22
24	0.8	6.4	4.9	4.0	1.6	10.1	3.1	4.1	7.2	5.7	24
26	9.2	22.5	21.6	18.8	8.6	26.3	14.6	19.1	20.3	19.7	26
28	51.4	13.9	36.0	66.4	21.1	67.2	36.2	63.4	51.6	56.6	28
30	75.1	46.7	63.8	61.1	64.6	93.4	63.6	61.4	83.7	73.2	30
32	107.5	97.3	64.2	69.0	91.8	107.5	103.3	68.5	102.2	87.0	32
34	97.6	98.4	86.7	69.4	90.1	98.7	97.9	71.1	95.8	84.7	34
36	12.6	121.6	114.2	92.1	101.8	96.4	56.9	94.3	98.2	95.7	36
38	70.1	85.3	103.3	107.8	134.0	95.2	76.3	107.4	108.3	107.3	38
40	155.4	95.9	105.1	86.0	92.1	51.7	131.3	87.9	65.4	76.8	40
42	132.0	131.8	125.0	98.3	107.4	48.9	131.9	101.0	68.7	84.4	42
44	140.4	102.1	96.9	95.7	87.5	70.0	124.8	95.8	76.0	85.8	44
46	94.3	78.2	83.5	81.8	65.0	73.4	87.8	81.9	70.5	76.0	46
48	35.6	68.0	48.1	64.0	53.7	64.8	48.8	62.4	61.1	61.4	48
50	6.0	14.0	21.5	23.6	33.9	34.6	9.3	23.4	34.3	28.9	50
52	9.1	13.4	10.1	19.8	16.3	17.9	10.9	18.9	17.4	17.9	52
54		1.1	1.9	14.2	12.4	13.8	0.4	12.9	13.3	12.9	54
56		3.2	0.3	11.7	9.1	8.3	1.3	10.5	8.5	9.3	56
58	2.7			5.4	2.6	7.3	1.6	4.9	5.7	5.2	58
60			1.0	2.8	3.4	3.6		2.6	3.5	3.0	60
62				3.8	0.8	2.7		3.5	2.1	2.6	62
64					1.4	1.2		1.3	0.8	1.0	64
66						0.8	0.4		0.5	0.3	66
68						0.1			0.1	0.04	68
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	6	4	6	13	19	21	10	19	40	69	
SAMPLING WEIGHT(kg)	328	264	700	2508	2051	3552	592	3207	5604	9403	
No. F.MEASURED	508	384	1134	3630	2873	5236	892	4764	8109	13765	
MEAN LENGTH(cm)	39.7	40.0	39.5	40.4	40.4	39.1	39.8	40.3	39.5	39.9	
MEAN WEIGHT(g)	658	677	661	726	708	671	666	719	683	699	
DEPTH RANGE (m)	737/1066	803/1277	48/205	59/289	120/900	57/290	737/1277	48/289	57/900	48/1277	

TABLE XVI-A: AMERICAN PLAICE, DIV. 3O, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	AUG	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
18				0.9	1.9			1.3	0.3	18
20	0.2		2.6		7.5	0.2	2.6	3.1	1.1	20
22	1.7	9.5	4.0		8.0	2.8	4.0	3.3	3.0	22
24	6.4	24.5	14.7	0.4	15.4	8.9	14.7	6.5	8.8	24
26	28.0	62.4	52.3	4.7	33.7	32.7	52.3	16.6	30.7	26
28	73.8	70.5	117.7	15.9	57.7	73.3	117.7	33.0	67.8	28
30	81.7	71.9	87.9	44.3	96.0	80.3	87.9	65.4	77.5	30
32	65.8	65.6	104.2	70.6	109.5	65.8	104.2	86.5	74.2	32
34	77.7	64.2	54.8	63.2	91.1	75.8	54.8	74.6	73.6	34
36	83.8	61.0	68.6	85.1	92.8	80.6	68.6	88.2	81.3	36
38	94.2	91.6	125.8	94.2	95.1	93.9	125.8	94.6	96.9	38
40	84.3	86.0	67.5	78.3	74.8	84.5	67.5	76.9	81.1	40
42	87.0	82.0	61.0	90.1	58.8	86.3	61.0	77.3	81.8	42
44	96.8	82.2	75.8	111.9	81.7	94.8	75.8	99.5	94.2	44
46	70.2	46.0	66.2	87.3	49.7	66.8	66.2	71.9	68.0	46
48	58.1	31.5	64.9	78.1	49.4	54.5	64.9	66.3	58.2	48
50	27.5	29.4	22.5	51.3	27.0	27.7	22.5	41.4	30.5	50
52	31.3	28.3	3.1	46.2	16.3	30.9	3.1	33.9	29.1	52
54	16.9	23.5	0.3	29.5	12.6	17.8	0.3	22.6	17.3	54
56	7.7	23.5	1.6	20.3	6.8	9.9	1.6	14.8	10.3	56
58	3.2	24.0	1.9	15.7	6.7	6.1	1.9	12.1	7.1	58
60	2.2	13.6	0.9	7.8	3.4	3.8	0.9	6.0	4.1	60
62	1.2	4.4	0.9	3.6	1.9	1.7	0.9	2.9	1.9	62
64	0.1	4.4	0.9	1.0	0.6	0.7	0.9	0.8	0.7	64
66	0.3				0.6	0.2		0.3	0.2	66
68					0.3			0.1	0.03	68
70					0.6			0.3	0.1	70
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	26	4	4	19	12	30	4	31	65	
SAMPLING WEIGHT(kg)	3125	391	457	1708	923	3516	457	2632	6605	
No. F.MEASURED	4637	530	711	1953	1255	5167	711	3208	9086	
MEAN LENGTH(cm)	39.8	39.9	37.7	42.9	38.5	39.9	37.7	41.1	40.0	
MEAN WEIGHT (g)	700	751	586	880	641	707	586	782	714	
DEPTH RANGE (m)	320/660	388/579	122/178	140/365	122/453	320/660	122/178	122/453	122/660	

TABLE XVI-B: AMERICAN PLAICE, DIV. 3O, 2003:
length composition of the 280mm trawl catches.

LENGTH GROUP	APR =YEAR	LENGTH GROUP
46	66.7	46
48	66.7	48
50	200.0	50
52	66.7	52
54	133.3	54
56	66.7	56
58	200.0	58
60	66.7	60
62	66.7	62
64	66.7	64
TOTAL	1000	

No. SAMPLES	1
SAMPLING WEIGHT(kg)	29
No. F.MEASURED	15
MEAN LENGTH(cm)	55.7
MEAN WEIGHT (g)	1916
DEPTH RANGE (m)	114/141

TABLE XVII: YELLOWTAIL FLOUNDER, DIV. 3N, 2003: length composition of the trawl catches.

LENGTH GROUP	JUL	AUG	OCT	NOV	3rd Q.	4th Q.	YEAR	LENGTH GROUP
16				0.2		0.2	0.1	16
18				1.3		0.9	0.6	18
20	3.9	5.7		1.3	5.3	0.9	2.3	20
22	5.9	7.4	0.4	3.5	7.0	2.6	4.1	22
24	15.7	20.1	2.9	12.0	19.0	9.4	12.6	24
26	30.6	30.1	14.7	41.0	30.2	33.4	32.4	26
28	79.7	51.5	29.0	75.3	58.5	62.0	60.8	28
30	93.7	89.9	57.8	119.0	90.8	101.3	97.8	30
32	129.6	149.0	98.2	137.0	144.2	125.8	131.9	32
34	216.9	168.1	146.8	143.6	180.2	144.5	156.4	34
36	154.5	128.7	178.5	125.0	135.1	140.4	138.7	36
38	114.6	121.7	171.2	118.2	119.9	133.5	129.0	38
40	96.2	93.0	99.6	59.7	93.8	71.2	78.7	40
42	42.6	58.9	56.1	50.0	54.9	51.8	52.8	42
44	10.1	45.9	51.5	50.0	37.0	50.4	46.0	44
46	3.9	15.4	40.5	36.0	12.6	37.3	29.1	46
48		9.0	31.7	14.5	6.8	19.5	15.3	48
50		4.4	11.6	5.6	3.3	7.3	6.0	50
52	2.0	1.3	8.0	4.2	1.5	5.3	4.1	52
54			0.9	1.5		1.3	0.9	54
56			0.5	1.0		0.9	0.6	56
TOTAL	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	4	2	6	14	6	20	26	
SAMPLING WEIGHT(kg)	233	274	627	1509	506	2135	2642	
No. F.MEASURED	563	665	1276	3459	1228	4735	5963	
MEAN LENGTH(cm)	35.2	36.1	38.1	36.1	35.9	36.7	36.4	
MEAN WEIGHT (g)	436	478	567	487	468	510	496	
DEPTH RANGE (m)	48/87	59/63	120/550	57/347	48/87	57/550	48/550	

TABLE XVIII: GREENLAND HALIBUT, DIV. 3L, 2003: length composition of the trawl catches.

LENGTH GROUP	JAN	FEB	MAR	APR	JUN	JUL	SEP	OCT	1st Q.	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
26							11.6				0.6		0.04	26
28		2.1	1.4	2.2		8.2			1.7	2.0	7.8		2.1	28
30		4.0	8.9	13.4		12.1	23.3		6.5	12.4	12.7		8.5	30
32	6.1	21.0	22.0	31.0	7.6	26.5	46.5	2.4	21.2	29.3	27.6	2.4	23.7	32
34	12.5	27.4	49.8	39.4	12.1	44.3	69.8	6.0	39.0	37.4	45.7	6.0	38.6	34
36	56.4	76.1	78.5	91.3	24.7	52.3	58.1	22.2	76.9	86.5	52.6	22.2	77.5	36
38	186.0	109.5	155.6	128.5	39.3	82.1	69.8	43.5	136.3	122.0	81.4	43.5	127.8	38
40	106.8	141.5	180.7	156.5	105.8	119.3	139.5	66.9	161.6	152.9	120.4	66.9	155.5	40
42	285.7	136.8	149.3	138.5	135.5	179.3	116.3	81.4	147.5	138.3	175.9	81.4	145.8	42
44	87.5	117.4	105.0	98.2	191.5	121.6	58.1	81.6	110.0	105.0	118.2	81.6	108.7	44
46	127.9	116.5	68.5	80.8	163.0	86.0	116.3	108.9	91.1	86.7	87.7	108.9	89.8	46
48	62.1	93.6	67.5	84.3	135.2	83.6	127.9	107.6	78.7	88.0	86.0	107.6	82.1	48
50	44.3	66.7	40.3	49.7	59.7	56.0	81.4	81.1	51.9	50.4	57.4	81.1	52.1	50
52	18.2	51.8	30.1	21.1	29.7	39.5	34.9	53.8	39.2	21.7	39.3	53.8	34.4	52
54	6.4	20.5	18.9	23.3	19.2	23.0	34.9	98.2	19.3	23.0	23.7	98.2	21.5	54
56	9.9	8.7	16.8	20.1	20.3	11.6	79.1	9.0	17.1	19.8	79.1	12.8	56	
58	1.2	5.7	7.8	14.6	15.1		41.1	3.6	8.3	14.3	41.1	6.0	58	
60	1.5	2.3	7.3	13.4	0.8		28.0	1.9	7.7	0.8	28.0	3.8	60	
62	0.3	1.0	2.2	9.3	11.5		18.2	0.6	2.7	10.8	18.2	2.0	62	
64	0.5	1.0	3.7	4.5	2.6		18.4	0.7	3.8	2.5	18.4	1.9	64	
66	0.2	1.4	1.6	2.9	6.1		9.9	0.8	1.7	5.8	9.9	1.5	66	
68	1.0	1.8	1.1	2.0	2.1		15.2	1.4	1.1	2.0	15.2	1.5	68	
70	0.3	1.2		4.0	2.1		13.0	0.8	0.3	2.0	13.0	0.8	70	
72		0.1	0.3		3.5		10.0	0.0	0.3	3.4	10.0	0.4	72	
74		0.3					5.4	0.1			5.4	0.1	74	
76			0.1		2.0			0.0		0.1		0.1	76	
78			0.2	0.2	2.0	1.9		2.4	0.1	0.4	1.8	2.4	0.3	78
80			0.1	0.8	1.9			2.4	0.0	0.9		2.4	0.3	80
82				0.1					0.0			0.03	82	
84							3.0				3.0	0.03	84	
86								0.0			3.0	0.03	86	
88									0.0		0.0	0.03	88	
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	27	31	22	4	7	1	4	60	26	8	4	98	
SAMPLING WEIGHT(kg)	126	1778	3107	2085	716	1256	65	373	5011	2802	1321	373	9507	
No. F.MEASURED	160	2119	3842	2562	779	1580	86	289	6121	3341	1666	289	11417	
MEAN LENGTH(cm)	43.2	44.1	43.0	43.5	46.7	44.7	43.5	50.9	43.5	43.7	44.6	50.9	43.7	
MEAN WEIGHT (g)	778	846	789	826	1050	941	833	1465	814	842	935	1465	837	
DEPTH RANGE (m)	919/969	690/1081	716/1066	714/1040	810/1007	710/1005	1080/1097	823/1133	690/1081	714/1040	710/1097	823/1133	690/1133	

TABLE XIX: GREENLAND HALIBUT, DIV. 3M, 2003: length composition of the trawl catches.

LENGTH GROUP	JAN	FEB	MAR	APR	JUN	OCT	1st Q.	2nd Q.	4th Q.	YEAR	LENGTH GROUP
28			0.1				0.1			0.1	28
30		0.6	0.7	8.1			0.6	7.2		1.2	30
32	2.9	6.3	5.6	16.6			5.3	14.8		6.1	32
34	6.6	11.5	14.6	53.6			13.1	47.8		16.2	34
36	12.6	27.6	30.5	65.2	12.2		27.5	59.4		30.1	36
38	54.8	56.0	51.7	125.5	24.4		52.6	114.6		57.5	38
40	83.3	95.9	95.9	143.2	24.4	12.5	94.0	130.4	12.5	96.1	40
42	115.7	151.7	107.0	161.4	73.2	62.5	112.1	151.9	62.5	115.0	42
44	113.0	111.4	126.3	162.4	48.8	112.5	123.0	150.1	112.5	125.4	44
46	171.1	188.4	143.7	95.0	36.6	75.0	151.6	88.7	75.0	144.5	46
48	146.0	166.3	133.6	52.5	97.6	275.0	138.2	57.3	275.0	132.8	48
50	146.2	104.2	110.5	55.7	85.4	175.0	115.3	58.9	175.0	111.0	50
52	74.7	32.3	67.1	28.8	97.6	50.0	65.3	36.2	50.0	62.3	52
54	36.8	17.6	48.8	19.9	48.8	50.0	44.3	23.0	50.0	42.4	54
56	17.0	11.1	25.4		48.8	137.5	22.9	5.3	137.5	23.1	56
58	5.2	11.9	19.6	10.9	36.6	25.0	16.8	13.6	25.0	16.6	58
60	4.6	4.3	8.1		36.6	12.5	7.3	3.9	12.5	7.0	60
62	1.6	1.4	3.7		36.6	12.5	3.2	3.9	12.5	3.4	62
64	5.7	1.3	1.6		36.6		2.2	3.9		2.3	64
66	0.9		2.4	1.3	24.4		2.0	3.8		2.1	66
68	1.5		1.1		48.8		1.1	5.3		1.4	68
70			1.2		61.0		0.9	6.6		1.5	70
72			0.1		36.6		0.1	3.9		0.5	72
74					24.4			2.6		0.2	74
76					24.4			2.6		0.2	76
78			0.04		24.4		0.03	2.6		0.3	78
80											80
82			0.2					0.1		0.1	82
84			0.4					0.3		0.3	84
86					12.2			1.3		0.1	86
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	9	8	39	7	1	1	56	8	1	65	
SAMPLING WEIGHT(kg)	692	775	4205	441	174	89	5672	615	89	6376	
No. F.MEASURED	720	862	4715	560	82	80	6297	642	80	7019	
MEAN LENGTH(cm)	47.2	46.1	47.1	43.3	57.0	50.5	47.0	44.8	50.5	46.9	
MEAN WEIGHT (g)	1040	957	1050	795	2286	1269	1041	956	1269	1036	
DEPTH RANGE (m)	720/958	846/1081	769/1034	739/949	1045/1117	887/926	720/1081	739/1117	887/926	720/1117	

TABLE XX: GREENLAND HALIBUT, DIV. 3N, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	JUN	JUL	AUG	SEP	OCT	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
20				0.2					0.1		0.1	20
22			7.8	0.8				3.2	0.6		1.5	22
24	20.3		20.7	2.4				8.7	1.7		4.2	24
26			19.1	1.1				7.9	0.8		3.3	26
28	60.9		11.9	3.0				5.4	2.1		3.2	28
30	71.1	9.6	30.2	5.0	1.8			18.5	4.1		9.1	30
32	91.4	9.1	45.6	16.2	12.1	3.6	1.5	24.8	14.9	1.5	18.3	32
34	120.5	41.6	50.4	35.5	26.9	25.4	9.2	45.8	33.0	9.2	37.3	34
36	86.1	67.9	75.7	58.8	72.9	43.0	1.5	71.3	62.4	1.5	64.9	36
38	120.5	137.1	64.1	97.5	113.2	107.8	43.7	106.8	101.9	43.7	103.1	38
40	92.5	151.8	66.5	129.1	150.2	201.5	62.6	116.1	136.0	62.6	128.2	40
42	96.3	172.5	93.4	136.2	144.7	197.8	92.1	139.2	139.4	92.1	138.9	42
44	57.0	130.1	106.0	119.6	127.4	100.8	132.8	119.6	121.4	132.8	120.9	44
46	31.0	98.1	103.6	99.3	111.3	112.6	113.9	99.9	102.8	113.9	101.9	46
48	26.5	68.3	105.4	91.3	88.3	80.0	109.9	83.4	90.3	109.9	88.1	48
50	38.6	40.8	66.0	64.7	60.6	47.3	94.1	51.2	63.3	94.1	59.4	50
52	44.3	19.9	38.8	50.6	43.2	47.5	87.5	27.9	48.5	87.5	41.6	52
54	15.8	27.8	28.5	30.7	18.4	7.3	49.7	28.0	27.0	49.7	27.6	54
56	7.6	12.7	12.8	18.9	13.2	10.9	43.8	12.7	17.2	43.8	15.9	56
58	1.9	2.8	11.2	10.7	6.2	7.3	38.1	6.3	9.4	38.1	8.6	58
60	5.7	1.1	10.0	5.9	1.7		30.6	4.8	4.7	30.6	5.0	60
62	1.9		6.0	3.7	1.8	7.3	24.9	2.5	3.2	24.9	3.2	62
64			9.0	3.5	2.4			5.5	3.7	3.2	5.5	64
66			3.2	2.9	2.6			8.4	1.3	2.7	8.4	23
68	10.2	4.4	4.3	2.1	1.1			8.4	4.4	1.8	8.4	68
70			3.4	1.8				5.5	1.4	1.3	5.5	70
72			1.3	2.0				8.4	0.5	1.5	8.4	72
74		1.1	1.9	1.3				5.5	1.5	0.9	5.5	74
76			2.3	1.3					0.9	0.9	0.9	76
78			0.3	2.2				11.0	0.1	1.6	11.0	1.2
80				0.7				2.9		0.5	2.9	80
82		3.2	0.7	1.0				2.9	2.1	0.7	2.9	82
84				0.2						0.1	0.1	84
86												86
88								2.9			2.9	88
90												90
92								2.9			2.9	92
94											0.03	94
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	5	9	25	8	2	3	16	35	3	54	
SAMPLING WEIGHT(kg)	183	629	1172	5733	1619	164	451	1983	7516	451	9950	
No. F.MEASURED	240	828	1331	6475	2036	226	402	2399	8737	402	11538	
MEAN LENGTH(cm)	39.7	43.6	43.8	45.1	44.3	44.2	50.5	43.7	44.9	50.5	44.5	
MEAN WEIGHT (g)	669	840	923	961	867	851	1448	873	933	1448	917	
DEPTH RANGE (m)	737/939	803/1277	680/930	697/1300	711/1072	796/1074	730/1107	680/1277	697/1300	730/1107	680/1300	

TABLE XXI: GREENLAND HALIBUT, DIV. 3O, 2003:
length composition of the trawl catches.

LENGTH GROUP	APR =YEAR	LENGTH GROUP
34	17.7	34
36	17.7	36
38	61.9	38
40	97.3	40
42	168.1	42
44	230.1	44
46	194.7	46
48	177.0	48
50	26.5	50
52	8.8	52
TOTAL	1000	
No. SAMPLES	1	
SAMPLING WEIGHT(kg)	86	
No. F.MEASURED	113	
MEAN LENGTH(cm)	44.9	
MEAN WEIGHT (g)	869	
DEPTH RANGE (m)	676/751	

TABLE XXII: ROUGHHEAD GRENADE, DIV. 3L, 2003: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	JUN	JUL	SEP	OCT	1st Q.	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
4			9.1						6.7			1.5	4
5													5
6		1.3	4.2		1.9			1.2	3.1	1.8		1.7	6
7	1.6	13.4	64.6	21.8	7.5	20.0	18.3	12.7	53.4	7.7	18.3	21.2	7
8	12.1	24.7	38.5	25.0	14.9		4.1	23.9	35.0	14.6	4.1	24.5	8
9	43.8	53.1	67.9	67.9	51.5		12.0	52.5	67.9	50.7	12.0	54.8	9
10	115.8	136.9	192.6	158.3	131.9	140.0	65.9	135.6	183.6	132.0	65.9	144.3	10
11	232.2	186.3	164.5	133.1	173.4	140.0	96.3	189.2	156.2	172.8	96.3	177.3	11
12	312.8	255.6	193.8	143.4	210.2	100.0	142.6	259.1	180.5	208.4	142.6	231.2	12
13	124.0	146.6	124.4	119.6	141.3	160.0	91.9	145.2	123.1	141.6	91.9	138.6	13
14	66.0	87.3	62.7	92.8	78.7	120.0	104.5	86.0	70.6	79.3	104.5	81.9	14
15	14.6	35.0	38.5	50.7	42.2	120.0	95.9	33.7	41.7	43.4	95.9	38.3	15
16	22.8	22.5	17.3	29.5	23.6		44.7	22.5	20.5	23.2	44.7	22.7	16
17	10.5	12.5	4.4	35.3	28.5	20.0	38.6	12.4	12.6	28.4	38.6	15.4	17
18	1.6	5.4	4.2	26.5	16.3		33.0	5.2	10.1	16.1	33.0	8.5	18
19	11.4	2.3	0.7	6.3	10.3		44.7	2.9	2.2	10.1	44.7	4.7	19
20	10.5	3.9	0.9	21.3	12.5		16.5	4.3	6.2	12.3	16.5	6.2	20
21	3.2	4.9	1.4	26.5	19.1	20.0	30.7	4.8	8.0	19.1	30.7	8.2	21
22	7.3	1.9	10.4	6.0	8.4	20.0	39.9	2.2	9.2	8.6	39.9	5.6	22
23		2.2		12.9	12.3		18.3	2.1	3.4	12.1	18.3	4.3	23
24	4.1	1.7		2.8	10.4		8.4	1.9	0.7	10.2	8.4	3.0	24
25		1.2		9.8	2.9		20.8	1.2	2.6	2.8	20.8	2.1	25
26	1.6	0.2		0.7	1.9	40.0	18.7	0.3	0.2	2.5	18.7	1.0	26
27	4.1	0.5		4.9		40.0	38.1	0.7	1.3	0.6	38.1	1.6	27
28		0.1		4.9		40.0	12.4	0.1	1.3	0.6	12.4	0.7	28
29					0.5	20.0	4.1			0.8	4.1	0.2	29
30			0.4					0.4			0.2	0.2	30
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	14	7	4	7	1	3	16	11	8	3	38	
SAMPLING WEIGHT(kg)	134	988	428	269	647	47	227	1122	697	694	227	2740	
No. F.MEASURED	368	2409	1159	539	1378	50	188	2777	1698	1428	188	6091	
MEAN LENGTH(cm)	12.7	12.5	11.8	13.5	13.3	15.4	16.1	12.5	12.2	13.4	16.1	12.7	
MEAN WEIGHT (g)	423	399	350	537	495	820	859	400	399	500	859	425	
DEPTH RANGE (m)	748/851	716/1067	830/1038	810/1007	710/1005	1080/1097	848/1133	716/1067	810/1038	710/1097	848/1133	710/1133	

TABLE XXIII: ROUGHHEAD GRENADE, DIV. 3M, 2003: length composition of the trawl catches.

LENGTH GROUP	JAN	FEB	MAR	JUN	OCT	1st Q.	2nd Q.	4th Q.	YEAR	LENGTH GROUP
5			0.3			0.3			0.3	5
6			1.6			1.3			1.3	6
7			3.2	20.0		2.7	20.0		2.8	7
8		8.5	5.5			5.1			4.9	8
9		20.0	27.3	120.0		24.2	120.0		24.2	9
10	2.9	81.6	41.7	180.0		39.6	180.0		39.5	10
11	12.1	170.8	50.3	200.0		51.9	200.0		51.6	11
12	88.5	332.5	113.3	100.0	12.5	120.7	100.0	12.5	118.3	12
13	202.5	154.7	160.1	160.0	25.0	164.1	160.0	25.0	161.1	13
14	143.2	71.6	169.2	100.0	75.0	162.1	100.0	75.0	159.9	14
15	146.6	66.2	148.0	80.0	75.0	144.2	80.0	75.0	142.3	15
16	205.1	26.2	129.5		262.5	132.5		262.5	134.6	16
17	95.6	13.1	69.0		100.0	69.2		100.0	69.5	17
18	37.4	6.9	38.6		50.0	37.1		50.0	37.1	18
19	18.7	14.6	10.5		112.5	11.5		112.5	13.6	19
20	18.5	9.3	16.8		100.0	16.6		100.0	18.4	20
21	19.1	8.5	7.7		25.0	8.9		25.0	9.2	21
22		2.3	1.0		25.0	0.9		25.0	1.4	22
23			1.0		37.5	0.9		37.5	1.6	23
24		6.9	0.0	20.0	50.0	0.4	20.0	50.0	1.5	24
25	3.4	6.2	4.1	20.0		4.1	20.0		4.1	25
26			1.0		25.0	0.8		25.0	1.3	26
27		6.3	0.3			0.9			0.8	27
28					25.0			25.0	0.5	28
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	2	23	1	1	28	1	1	30	
SAMPLING WEIGHT(kg)	135	102	1262	23	74	1500	23	74	1597	
No. F.MEASURED	240	233	2866	50	80	3339	50	80	3469	
MEAN LENGTH(cm)	15.5	13.2	14.6	12.6	18.6	14.7	12.6	18.6	14.7	
MEAN WEIGHT (g)	663	462	581	430	1046	584	430	1046	593	
DEPTH RANGE (m)	720/954	938/1081	839/1034	1045/1117	890/923	720/1081	1045/1117	890/923	720/1117	

TABLE XXIV: ROUGHHEAD GRENADE, DIV. 3N, 2003: length composition of the trawl catches.

LENGTH GROUP	MAY	JUN	JUL	AUG	SEP	OCT	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
4		0.5	1.5				0.1	1.0		0.8	4
5	0.6	1.6	1.7			5.6	0.9	1.1	5.6	1.1	5
6		3.1	3.2	5.6			0.9	4.0		3.2	6
7	23.6	6.7	6.0	23.4		8.5	18.6	11.9	8.5	13.5	7
8	22.4	20.1	15.8	18.8		14.8	21.7	16.6	14.8	17.8	8
9	47.2	53.2	49.3	51.8	19.0	20.3	49.0	49.8	20.3	49.3	9
10	145.8	138.3	148.5	164.1	127.0	93.3	143.6	153.6	93.3	150.7	10
11	182.5	183.7	190.3	198.6	228.6	93.4	182.8	193.6	93.4	190.2	11
12	320.1	223.5	217.4	250.5	254.0	140.5	291.9	229.2	140.5	243.2	12
13	118.0	122.7	140.1	153.0	193.6	132.7	119.4	145.2	132.7	139.0	13
14	50.0	57.5	70.6	64.5	41.3	95.3	52.2	68.1	95.3	64.6	14
15	23.8	38.3	39.3	34.6	54.0	75.6	28.0	37.9	75.6	35.9	15
16	25.1	31.2	24.7	10.7	22.2	49.5	26.9	19.8	49.5	21.8	16
17	7.1	29.4	17.5	2.3	15.9	43.5	13.6	12.2	43.5	12.8	17
18	11.6	18.5	16.4	5.6	9.5	31.5	13.6	12.6	31.5	13.0	18
19	5.9	11.0	11.3	4.5	9.5	31.3	7.4	8.9	31.3	8.7	19
20	4.2	14.4	6.3	0.6		17.1	7.2	4.3	17.1	5.1	20
21	2.4	12.0	7.1	3.0		26.2	5.2	5.6	26.2	5.7	21
22	3.0	8.6	9.1	4.0	12.7	32.1	4.6	7.4	32.1	6.9	22
23	1.9	11.9	7.7	2.5		20.2	4.8	5.8	20.2	5.7	23
24	3.4	5.8	7.4	1.7		14.5	4.1	5.4	14.5	5.1	24
25	1.7	3.2	4.1				2.1	2.7		2.5	25
26		3.4	2.4		12.7	14.2	1.0	1.7	14.2	1.7	26
27	0.7	2.1				31.1	0.2	1.3	31.1	1.3	27
28	0.7	0.3				5.6	0.2	0.2	5.6	0.3	28
29											29
30							2.9		2.9	0.03	30
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	4	9	25	6	2	3	13	33	3	49	
SAMPLING WEIGHT(kg)	293	707	2920	478	107	176	1000	3504	176	4680	
No. F.MEASURED	751	1471	6129	1241	252	243	2222	7622	243	10087	
MEAN LENGTH(cm)	12.4	13.2	13.0	12.2	13.0	15.3	12.6	12.7	15.3	12.7	
MEAN WEIGHT (g)	389	483	463	373	444	752	417	432	752	431	
DEPTH RANGE (m)	750/1277	652/930	697/1300	780/1072	796/1074	730/1107	652/1277	697/1300	730/1107	652/1300	

TABLE XXV: ROUGHHEAD GRENADE, DIV. 3O, 2003:
length composition of the trawl catches.

LENGTH GROUP	APR =YEAR	LENGTH GROUP
8	17.6	8
9	58.8	9
10	94.1	10
11	170.6	11
12	400.0	12
13	117.6	13
14	41.2	14
15	29.4	15
16	23.5	16
17	5.9	17
18	11.8	18
19	5.9	19
20		20
21	11.8	21
22	5.9	22
23	5.9	23
TOTAL	1000	
No. SAMPLES	1	
SAMPLING WEIGHT(kg)	67	
No. F.MEASURED	170	
MEAN LENGTH(cm)	12.6	
MEAN WEIGHT (g)	407	
DEPTH RANGE (m)	676/751	

TABLE XXVI: WITCH FLOUNDER, DIV. 3L, 2003: length composition of the trawl catches.

LENGTH GROUP	JAN	FEB	MAR	APR	JUL	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
22				0.3			0.3		0.1	22
24				0.8			0.8		0.2	24
26		0.6	3.0	0.5	1.3	1.8	0.5	1.3	1.4	26
28		0.6	10.5	2.4	7.9	5.7	2.4	7.9	4.7	28
30		2.3	13.8	4.3	27.0	8.3	4.3	27.0	7.7	30
32	37.5	29.4	19.2	98.2	37.1	24.3	98.2	37.1	48.7	32
34	100.0	66.0	33.4	68.5	77.8	50.2	68.5	77.8	57.1	34
36	237.5	129.6	84.9	218.9	156.1	110.2	218.9	156.1	147.0	36
38	162.5	305.2	173.5	198.0	262.7	231.4	198.0	262.7	221.8	38
40	187.5	147.1	133.4	144.3	127.1	141.5	144.3	127.1	141.9	40
42	100.0	111.3	178.4	111.5	112.7	145.9	111.5	112.7	133.5	42
44	112.5	74.0	133.5	99.7	68.4	106.4	99.7	68.4	102.8	44
46	25.0	67.9	162.5	3.7	65.4	115.6	3.7	65.4	77.6	46
48	37.5	42.2	30.7	47.6	32.7	36.1	47.6	32.7	39.7	48
50		16.5	20.8	0.9	19.4	18.1	0.9	19.4	12.6	50
52		6.7	1.7		4.4	3.8		4.4	2.6	52
54		0.6	0.6	0.7		0.6	0.7		0.6	54
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
No. SAMPLES	1	3	11	6	6	15	6	6	27	
SAMPLING WEIGHT(kg)	35	93	340	128	196	467	128	196	792	
No. F.MEASURED	80	196	772	315	441	1048	315	441	1804	
MEAN LENGTH(cm)	39.9	40.7	42.0	39.5	40.1	41.4	39.5	40.1	40.7	
MEAN WEIGHT(g)	443	476	528	430	460	502	430	460	477	
DEPTH RANGE (m)	942/969	928/1013	716/1066	836/1028	710/1005	716/1066	836/1028	710/1005	710/1066	

TABLE XXVII: WITCH FLOUNDER, DIV. 3M, 2003: length composition of the trawl catches.

LENGTH GROUP	JAN	FEB	MAR	1st Q.	LENGTH GROUP =YEAR
22			1.7		0.4 22
24			1.7	0.1	0.5 24
26			9.2	0.5	2.6 26
28			33.1	1.0	9.1 28
30			23.3	2.3	7.1 30
32	37.1	72.7		4.1	30.7 32
34	65.7	129.3		135.5	115.2 34
36	158.6	175.4		161.0	164.1 36
38	157.6	121.6		102.8	122.3 38
40	188.4	137.7		195.7	178.7 40
42	106.4	88.7		185.8	139.4 42
44	125.0	70.9		121.8	109.5 44
46	61.6	69.6		49.8	58.1 46
48	50.0	63.1		14.4	36.5 48
50	22.9	1.2		1.3	7.1 50
52	24.1	0.6		12.0	12.3 52
54	2.4			11.8	6.2 54
TOTAL	1000	1000	1000	1000	
No. SAMPLES	3	5	17		25
SAMPLING WEIGHT(kg)	122	161	360		644
No. F.MEASURED	240	403	762		1405
MEAN LENGTH(cm)	41.4	39.3	40.9		40.6
MEAN WEIGHT(g)	506	435	481		476
DEPTH RANGE (m)	863/944	868/1055	769/1034		769/1055

TABLE XXVIII: WITCH FLOUNDER, DIV. 3N, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	JUN	JUL	AUG	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
24					0.2	0.9	0.9	2.5		0.7	1.6	0.9
26					3.8	5.8	4.0	1.2		5.4	2.7	4.0
28		28.6	6.4		7.2	11.4	9.3	20.0	5.7	10.5	14.1	11.1
30		85.7	12.4	17.2	21.2	29.6	38.0	40.6	14.2	27.8	39.1	29.8
32		171.4	50.3	40.3	50.9	61.4	52.6	81.4	50.6	59.1	65.6	60.2
34		171.4	91.9	37.6	90.2	108.3	106.4	109.8	84.9	104.4	107.9	103.4
36		228.6	153.0	59.9	201.9	158.9	116.9	146.4	140.1	168.3	130.3	153.8
38		142.9	141.0	123.1	191.8	188.5	139.8	146.0	138.4	189.2	142.6	169.9
40		57.1	112.4	178.2	144.6	146.9	109.5	119.4	121.5	146.4	113.9	134.0
42		85.7	119.1	195.4	121.6	124.9	138.3	143.0	130.1	124.2	140.4	129.7
44		28.6	125.2	144.6	66.8	79.5	114.0	95.5	126.7	76.8	105.6	90.7
46			76.1	71.0	46.7	36.7	81.1	42.0	74.2	38.8	63.5	50.0
48			64.1	38.3	34.0	34.3	59.1	30.3	59.2	34.2	46.1	40.4
50			20.9	30.5	13.4	9.8	13.7	11.6	22.0	10.6	12.8	12.4
52			14.4	50.5	4.7	1.8	8.8	5.8	19.6	2.5	7.5	5.7
54			12.7	3.7		1.2	2.4	3.4	11.2	0.9	2.9	2.6
56					9.8	1.0		5.1	1.2	1.5	0.2	3.4
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
No. SAMPLES	1	5	7	20	14	15	13	13	34	28	75	
SAMPLING WEIGHT(kg)	12	201	146	647	862	616	425	359	1510	1042	2911	
No. F.MEASURED	35	402	247	1400	1957	1230	942	684	3357	2172	6213	
MEAN LENGTH(cm)	36.5	41.2	42.6	39.8	39.5	40.7	39.5	41.4	39.6	40.2	39.9	
MEAN WEIGHT (g)	356	550	610	485	476	540	481	556	478	514	497	
DEPTH RANGE (m)	737/796	803/1277	680/932	193/1200	70/1072	150/893	69/430	680/1277	70/1200	69/893	69/1277	

TABLE XXIX: WITCH FLOUNDER, DIV. 3O, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	AUG	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP	
24		0.3			0.7		0.2		0.5	0.3	24
26		1.4	5.2		0.7	6.9	1.7		2.5	1.8	26
28		24.8	21.3	18.9	16.6	11.0	24.5	18.9	15.0	22.1	28
30		64.7	49.6	78.9	32.1	40.4	63.5	78.9	34.5	57.3	30
32		63.4	84.2	103.1	86.8	82.8	65.2	103.1	85.7	71.4	32
34		103.3	75.8	119.7	105.2	107.6	101.0	119.7	105.9	102.8	34
36		147.6	137.1	109.8	141.5	206.0	146.8	109.8	160.0	148.5	36
38		178.4	166.9	120.2	187.8	134.4	177.5	120.2	172.5	174.1	38
40		133.9	120.6	69.4	142.4	155.3	132.8	69.4	146.1	133.5	40
42		133.8	96.8	101.1	110.2	122.8	130.7	101.1	113.8	125.6	42
44		61.8	82.8	96.5	74.2	64.5	63.6	96.5	71.4	66.7	44
46		35.9	64.1	75.2	48.3	36.8	38.2	75.2	45.0	41.2	46
48		24.0	58.9	91.8	37.7	23.2	26.9	91.8	33.6	30.9	48
50		18.2	16.0	7.7	7.9	7.5	18.0	7.7	7.8	15.2	50
52		6.1	6.4	3.9	6.5	0.7	6.1	3.9	4.8	5.7	52
54		0.6	4.8		1.4		0.9		1.0	0.9	54
56		0.8	6.4	3.9			1.2	3.9		1.1	56
58		0.9	3.2				1.1			0.8	58
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	21	4	3	16	10	25	3	26	54		
SAMPLING WEIGHT(kg)	1081	220	103	617	303	1301	103	920	2324		
No. F.MEASURED	2528	494	222	1327	750	3022	222	2077	5321		
MEAN LENGTH(cm)	39.2	40.0	39.7	39.5	39.0	39.2	39.7	39.3	39.3		
MEAN WEIGHT (g)	467	507	496	475	454	470	496	469	471		
DEPTH RANGE (m)	352/596	389/544	122/178	120/365	143/454	352/596	122/178	120/454	120/596		

TABLE XXXI: ATLANTIC HALIBUT, DIV. 3O, 2003:
length composition of the trawl catches.

LENGTH GROUP	YEAR	LENGTH GROUP	LENGTH GROUP	YEAR	LENGTH GROUP
56	2.4	56	48	21.4	48
58	297.3	58	50		50
60		60	52	21.8	52
62	10.8	62	54	6.4	54
64	101.0	64	56	24.6	56
66		66	58	16.6	58
68	10.8	68	60	5.1	60
70	189.3	70	62	30.2	62
72		72	64	23.9	64
74		74	66	44.3	66
76	84.5	76	68	59.7	68
78	2.4	78	70	38.1	70
80	177.5	80	72	44.9	72
82	101.0	82	74	9.2	74
84	2.4	84	76	14.5	76
86		86	78	103.3	78
88	2.4	88	80	27.3	80
90		90	82	46.1	82
92		92	84		84
94		94	86	37.2	86
96	10.8	96	88		88
98		98	90	35.1	90
100		100	92	25.9	92
102		102	94	7.3	94
104		104	96	20.9	96
106		106	98	41.5	98
108		108	100	6.4	100
110		110	102	21.7	102
112		112	104		104
114		114	106	15.8	106
116		116	108	23.7	108
118	5.3	118	110		110
120		120	112	7.3	112
122		122	114	5.1	114
124		124	116	32.3	116
126		126	118	24.3	118
128		128	120		120
130		130	122	122	
132	2.4	132	124	15.7	124
TOTAL	1000		126	6.7	126
			128	9.2	128
			130	23.3	130
			132		132
			134	15.8	134
			136	31.2	136
			138		138
			140	140	
			142		142
			144	144	
			146	15.8	146
			148		148
			150	150	
			152		152
			154	154	
			156		156
			158	23.7	158
			160		160
			162	16.6	162
No. SAMPLES	10		TOTAL	1000	
SAMPLING WEIGHT(kg)	163				
No. F.MEASURED	16		No. SAMPLES	19	
MEAN LENGTH(cm)	71.0		SAMPLING WEIGHT(kg)	1171	
MEAN WEIGHT (g)	5415		No. F.MEASURED	97	
DEPTH RANGE (m)	195/1150		MEAN LENGTH(cm)	91.0	
			MEAN WEIGHT (g)	15780	
			DEPTH RANGE (m)	120/657	

TABLE XXXII: WHITE HAKE, DIV. 3N, 2003: length composition of the trawl catches.

LENGTH GROUP	JUL	AUG	OCT	NOV	3rd Q.	4th Q.	YEAR	LENGTH GROUP
24			2.7			1.6	0.7	24
25								25
26								26
27								27
28								28
29		1.3	2.7	1.4	1.2	2.2	1.7	29
30				1.7		0.7	0.3	30
31		5.0			5.0		2.7	31
32		2.1	5.1	2.2	2.1	3.9	2.9	32
33		9.9	4.8	1.4	9.8	3.4	6.8	33
34	20.0	8.5	5.4	11.0	8.7	7.7	8.2	34
35	10.0	11.7	7.3	2.1	11.7	5.2	8.6	35
36	30.0	22.9	13.1	13.9	23.0	13.4	18.6	36
37	70.0	40.4	7.8	22.3	40.8	13.8	28.2	37
38	110.0	61.5	7.7	48.2	62.3	24.5	44.7	38
39	80.0	69.9	21.5	26.3	70.1	23.5	48.4	39
40	160.0	63.1	28.8	66.2	64.7	44.3	55.2	40
41	100.0	82.2	48.2	64.5	82.5	54.9	69.7	41
42	110.0	94.7	45.7	77.9	94.9	59.0	78.2	42
43	70.0	86.6	59.5	82.2	86.3	68.9	78.2	43
44	130.0	78.0	80.8	76.8	78.8	79.1	79.0	44
45	30.0	74.7	69.8	66.3	74.0	68.3	71.3	45
46	30.0	69.7	77.9	73.0	69.0	75.9	72.2	46
47	10.0	47.8	85.9	79.3	47.2	83.1	63.9	47
48	30.0	50.4	95.8	61.8	50.1	81.7	64.8	48
49		38.0	77.9	61.4	37.3	71.1	53.1	49
50	10.0	24.5	77.7	37.4	24.3	61.0	41.4	50
51		14.8	48.9	32.0	14.6	41.9	27.3	51
52		9.2	37.4	19.2	9.0	29.9	18.7	52
53		5.2	18.2	21.8	5.1	19.7	11.9	53
54		6.0	21.8	14.4	5.9	18.7	11.9	54
55		1.9	8.4	8.5	1.9	8.5	5.0	55
56		3.3	2.8	6.2	3.3	4.2	3.7	56
57		0.8	6.9	8.0	0.8	7.3	3.9	57
58		3.1	12.0	2.0	3.0	7.8	5.3	58
59		0.5	3.1	2.7	0.5	2.9	1.6	59
60		5.9	2.8	1.0	5.8	2.0	4.0	60
61		1.4	2.7	1.0	1.4	2.0	1.7	61
62		3.0	2.0	1.0	3.0	1.6	2.3	62
63			0.4			0.2	0.1	63
64			2.0	1.0		1.6	0.7	64
65		0.2	1.8	1.0	0.2	1.5	0.8	65
66		1.3	0.4		1.2	0.2	0.8	66
67		0.2		1.0	0.2	0.4	0.3	67
68		0.2			0.2		0.1	68
69			1.4			0.8	0.4	69
70			1.4	1.0		1.2	0.6	70
71								71
72								72
73								73
74				1.0		0.4	0.2	74
TOTAL	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	10	9	8	11	17	28	
SAMPLING WEIGHT(kg)	75	908	780	534	983	1314	2296	
No. F.MEASURED	100	1014	743	549	1114	1292	2406	
MEAN LENGTH(cm)	41.5	43.6	46.9	45.4	43.6	46.3	44.9	
MEAN WEIGHT (g)	732	885	1116	1002	882	1069	969	
DEPTH RANGE (m)	193/205	63/307	154/450	69/272	63/307	69/450	63/450	

TABLE XXXIII: WHITE HAKE, DIV. 3O, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	AUG	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
16					0.6			0.5	0.4	16
17										17
18										18
19					0.8			0.7	0.5	19
20										20
21										21
22										22
23										23
24					1.1			1.0	0.7	24
25					0.6			0.5	0.4	25
26					0.6			0.5	0.4	26
27	0.9				0.6	1.1	0.8	0.6	0.6	27
28					0.6			0.5	0.4	28
29				1.7	0.9	1.1		1.7	0.9	29
30					1.6	0.7			1.5	1.1
31	2.4	4.0			4.3	1.5	2.5		3.9	3.3
32	2.6	4.0	10.2		3.4	2.7	2.8	10.2	3.3	4.0
33	2.3				6.2	4.5	1.6	2.1	6.2	4.1
34	3.6				10.0	5.5	2.0	3.3	10.0	5.0
35	5.7	4.0			18.7	5.6	1.8	5.6	18.7	5.0
36	10.6	8.0			19.5	8.5	4.1	10.4	19.5	7.9
37	11.5				43.7	8.9	8.1	10.3	43.7	8.8
38	24.1	3.0			69.8	21.1	11.9	21.8	69.8	19.8
39	21.3	5.9			83.1	21.5	31.0	19.7	83.1	22.8
40	38.7	15.4			109.3	36.0	54.7	36.3	109.3	38.6
41	36.6	4.0			99.0	50.3	48.3	33.1	99.0	50.0
42	42.7	16.9			116.1	62.2	73.5	40.0	116.1	63.7
43	44.6	3.0			106.1	72.2	86.2	40.2	106.1	74.2
44	52.6	17.2			73.7	61.6	72.5	48.8	73.7	63.1
45	64.0	25.6			56.5	68.2	78.6	59.9	56.5	69.6
46	55.2	24.7			36.8	89.3	89.2	52.0	36.8	89.3
47	63.7	48.9			24.8	68.9	81.4	62.1	24.8	70.6
48	90.3	50.7			40.9	76.6	79.8	86.0	40.9	77.0
49	59.7	38.4			29.4	61.2	68.9	57.4	29.4	62.2
50	37.9	31.3			13.3	52.2	41.5	37.2	13.3	50.7
51	36.3	24.9			14.3	29.0	25.0	35.1	14.3	28.4
52	31.8	32.6			9.1	34.1	29.0	31.9	9.1	33.4
53	42.7	62.6			1.9	16.9	16.2	44.9	1.9	16.8
54	41.3	47.4			1.7	21.4	14.0	41.9	1.7	20.4
55	35.6	57.4			1.9	13.5	20.7	37.9	1.9	14.5
56	25.3	80.4				12.2	11.2	31.2		12.1
57	22.5	83.4				13.3	8.7	29.0		12.7
58	16.1	50.9				11.3	7.5	19.8		10.7
59	13.9	68.2				6.2	5.8	19.7		6.2
60	13.1	34.6				8.4	0.7	15.4		7.4
61	11.1	26.3				5.8	2.4	12.8		5.4
62	10.0	18.5				3.3	1.8	10.9		3.1
63	2.5	16.0				2.1	2.5	3.9		2.1
64	3.0	9.3				2.5	0.5	3.7		2.2
65	5.1	20.7	2.4			2.0	1.1	6.8	2.4	1.8
66	2.8	10.2				3.5	2.1	3.6		3.3
67	4.3	14.3				2.4	2.1	5.3		2.4
68	6.0	14.3				2.9	2.8	6.9		2.9
69	0.8	6.4				2.4		1.4		2.0
70	1.7					2.9	1.1	1.5		2.6
71	0.3	6.4				2.6	0.7	1.0		2.4
72	1.7	10.4				2.4		2.6		2.0
73	0.8					2.5		0.8		1.7
74						1.4	1.1			1.4
75						1.0				0.9
76						0.6				0.5
77						1.5				1.3
78										78
79						0.3	1.1			0.4
80										80
81						0.6				81
82										82
83										83
84										84
85						1.1				1.0
86										86
87						0.8				0.5
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
No. SAMPLES	21	4	4	19	12	25	4	31	60	
SAMPLING WEIGHT(kg)	2271	582	325	2377	982	2854	325	3359	6538	
No. F.MEASURED	1918	331	394	2036	915	2249	394	2951	5594	
MEAN LENGTH(cm)	48.7	54.6	42.5	47.4	46.7	49.3	42.5	47.3	47.1	
MEAN WEIGHT (g)	1294	1852	803	1204	1103	1354	803	1190	1170	
DEPTH RANGE (m)	365/821	412/657	166/571	144/365	143/454	365/821	166/571	143/454	143/821	

TABLE XXXIV: THORNY SKATE, DIV. 3L, 2003: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	APR	JUN	JUL	SEP	OCT	1st Q.	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
13		1.8						1.7				1.1	13
14													14
15													15
16													16
17		2.9						11.8	2.8			11.8	1.8
18		13.6	5.6		7.6		47.6	15.3	12.9	5.4		15.3	9.6
19		16.0						15.2	0.3	1.0			9.6
20	22.8	27.1	25.3	7.6	18.0	47.6	41.7	26.9	24.5	18.6	41.7	25.6	20
21		18.7	22.9		11.3	47.6		17.7	21.9	12.0			18.2
22	30.1	59.5	40.1	31.4	91.3		11.8	58.0	39.7	89.4	11.8	55.6	22
23	45.6	75.6	23.9	7.6	21.5	47.6		74.1	23.2	22.1			54.4
24	30.1	92.2	54.1	31.4	90.5	47.6	80.5	89.0	53.1	89.6	80.5	79.1	24
25		67.8	15.8		12.3		41.7	64.3	15.1	12.1	41.7	45.5	25
26	68.0	111.3	74.1	39.0	53.7		38.2	109.1	72.5	52.6	38.2	93.0	26
27	52.9	59.2	50.3	56.5	49.8	47.6	41.7	58.9	50.6	49.8	41.7	55.6	27
28	98.6	67.7	107.7	31.4	95.9		65.2	69.3	104.3	93.9	65.2	81.3	28
29	113.2	29.4	63.9	7.6	28.7	47.6	53.5	33.7	61.4	29.1	53.5	41.1	29
30	128.7	93.9	70.7	46.6	63.4	47.6	106.9	95.7	69.6	63.1	106.9	85.4	30
31	45.6	36.5	59.7	17.5	58.9	47.6	26.4	37.0	57.8	58.7	26.4	44.7	31
32		40.0	56.5	72.7	46.8	47.6	95.2	38.0	57.3	46.8	95.2	44.6	32
33	98.6	33.1	40.2		47.0	95.2	53.5	36.5	38.4	48.0	53.5	38.2	33
34		42.0	28.6	31.4	32.2		38.2	39.9	28.7	31.5	38.2	36.0	34
35	15.1	9.2	5.6	48.9	11.3	47.6	11.8	9.5	7.5	12.0	11.8	9.2	35
36	91.3	38.3	66.9	94.6	63.6	95.2	106.9	41.0	68.2	64.3	106.9	51.3	36
37	22.8	7.8	12.9	23.8	31.5	95.2	26.4	8.6	13.4	32.9	26.4	12.4	37
38		8.5	52.3	109.8	99.4	47.6	65.2	8.1	54.9	98.3	65.2	30.1	38
39		2.8	5.4	32.8	20.0		52.8	2.7	6.6	19.6	52.8	5.8	39
40	45.6	18.9	46.3	144.4	37.5	142.9	15.3	20.3	50.6	39.7	15.3	30.5	40
41	60.7	11.3	29.2	134.5	6.5			13.8	33.9	6.3		18.6	41
42		7.4	12.8	22.9	8.7			7.0	13.2	8.5		8.8	42
43	15.1		1.5					0.8	1.4			0.9	43
44	15.1	1.3	12.5					2.0	11.9			4.6	44
45		2.7	5.6					2.5	5.4			3.0	45
46		3.1	5.6					3.0	5.4			3.3	46
47													47
48													48
49													49
50													50
51													51
52			3.9							3.7		1.0	52
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	15	7	4	6	1	3	17	11	7	3	38	
SAMPLING WEIGHT(kg)	114	782	516	204	293	39	87	896	720	332	87	2034	
No. F.MEASURED	53	478	262	78	172	21	55	531	340	193	55	1119	
MEAN LENGTH(cm)	31.4	28.3	31.1	35.1	30.8	32.0	31.1	28.4	31.3	30.8	31.1	29.5	
DEPTH RANGE (m)	748/851	716/1066	830/1038	810/1007	853/1005	1080/1097	848/1133	716/1066	810/1038	853/1097	848/1133	716/1133	

TABLE XXXV: THORNY SKATE, DIV. 3M, 2003: length composition of the trawl catches.

LENGTH GROUP	FEB	MAR	1st Q. =JUN	2nd Q. =JUN	YEAR	LENGTH GROUP
16		18.8	18.0		17.8	16
17						17
18		4.7	4.5		4.4	18
19		0.9	0.9		0.9	19
20		29.3	27.9		27.6	20
21		29.0	27.6	83.3	28.2	21
22		49.0	46.7		46.3	22
23		51.5	49.1		48.6	23
24		47.1	45.0	83.3	45.3	24
25		28.3	27.0		26.7	25
26	125.0	78.7	80.9	83.3	80.9	26
27		59.3	56.6	83.3	56.8	27
28	62.5	61.4	61.4		60.8	28
29		59.7	57.0		56.4	29
30		105.8	100.9	83.3	100.8	30
31	62.5	25.6	27.3		27.1	31
32		64.4	61.4	83.3	61.6	32
33	125.0	54.2	57.4	83.3	57.7	33
34		28.2	26.9		26.6	34
35	62.5	7.4	9.9	83.3	10.6	35
36		42.5	40.5	83.3	40.9	36
37	62.5	25.5	27.2	83.3	27.7	37
38	62.5	20.1	22.0	83.3	22.6	38
39	62.5	1.0	3.8		3.8	39
40	187.5	42.3	49.0	83.3	49.3	40
41	62.5	13.6	15.9		15.7	41
42	62.5	4.7	7.3		7.3	42
43		21.8	20.8		20.6	43
44	62.5	17.8	19.9		19.7	44
45						45
46		5.9	5.6		5.6	46
47		1.7	1.6		1.6	47
TOTAL	1000	1000	1000	1000	1000	
No. SAMPLES		1	15	16	1	17
SAMPLING WEIGHT(kg)	48	649	697	22	718	
No. F.MEASURED	16	338	354	12	366	
MEAN LENGTH(cm)	36.3	30.1	30.4	32.1	30.4	
DEPTH RANGE (m)	884/972	839/1034	839/1034	1045/1117	839/1117	

TABLE XXXVI: THORNY SKATE, DIV. 3N, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
16							4.0	2.0			2.9	0.6	16
17				1.0				5.1		0.2	2.7	0.6	17
18		5.2	3.6	1.9	5.7		0.4	2.5	4.8	5.0	1.5	4.3	18
19			14.2	11.0	3.9	1.4		10.1	13.1	1.9	5.4	4.1	19
20			46.3	10.6	16.1	8.0	4.9		40.7	9.6	2.3	12.5	20
21			20.5	18.4	15.2	6.7	2.8	1.9	19.0	8.4	2.3	8.7	21
22		67.4	33.9	21.1	23.4	71.4	10.7	7.5	60.6	23.0	9.0	25.6	22
23	26.4	22.4	10.6	11.3	5.3		3.0	2.0	21.8	6.5	2.5	7.9	23
24		59.4	66.0	53.9	48.4	71.4	6.9	14.8	56.0	49.5	11.1	43.0	24
25		11.2	16.5	9.9	16.4			1.9	10.9	15.1	1.0	11.8	25
26	33.4	72.2	40.4	40.0	48.4	71.4	11.1	6.5	67.4	46.8	8.7	42.3	26
27	20.2	40.4	22.3	37.5	26.2		18.0	14.0	37.8	28.3	15.9	27.2	27
28	39.6	56.1	32.9	45.0	40.9	71.4	14.8	13.6	53.4	41.7	14.1	38.0	28
29	20.2	15.6	20.9	34.3	33.7		10.1	11.6	16.3	33.8	10.9	27.0	29
30	59.8	46.4	17.3	46.5	65.2	142.9	30.7	29.6	45.2	61.7	30.1	53.3	30
31	39.6	23.8	21.6	23.8	36.0		15.7	16.7	24.6	33.6	16.2	29.0	31
32	33.4	30.8	77.6	60.9	69.3	71.4	24.8	22.7	34.3	67.7	23.7	54.6	32
33	53.7	48.7	51.8	46.3	27.6	71.4	33.1	25.7	49.2	31.2	29.1	33.3	33
34	20.2	11.5	16.2	23.8	38.4		22.3	17.0	12.4	35.6	19.5	29.2	34
35	26.4	19.7	12.5	52.4	31.2		23.9	28.3	19.6	35.2	26.3	31.3	35
36	87.1	57.0	69.9	58.0	85.7	142.9	80.1	50.4	59.9	80.5	64.2	74.5	36
37	33.4	16.2	64.1	35.5	33.6	142.9	36.9	38.5	20.8	34.0	37.7	32.9	37
38	119.6	58.3	163.3	105.5	135.3		133.3	106.7	69.9	129.5	119.1	119.2	38
39	13.2	41.5	40.8	54.6	43.0	71.4	25.6	34.5	39.6	45.3	30.3	41.6	39
40	80.0	107.8	94.2	132.0	99.4	71.4	205.2	172.7	105.0	105.6	187.9	121.3	40
41	26.4	57.0	60.9	44.0	44.1		112.3	92.0	55.3	44.0	101.5	56.7	41
42	73.0	38.7	15.5	21.3	16.8		46.1	91.6	39.2	17.7	70.4	30.8	42
43	13.2		3.2	0.9	4.6		16.7	43.2	1.1	3.9	30.9	8.7	43
44	107.3	11.5	4.1	3.2	5.3		50.3	60.4	17.2	4.9	55.7	16.4	44
45							24.5	28.4			26.6	5.1	45
46		27.3					23.0	29.9	1.8		26.7	5.4	46
47		33.4					5.5	18.3	2.2		12.4	2.7	47
48							3.2				1.5	0.3	48
49													49
50													50
51		13.2							0.9			0.1	51
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	4	9	25	15	1	17	15	15	41	32	88	
SAMPLING WEIGHT(kg)	315	429	434	1738	1234	26	1313	1191	1178	2998	2503	6679	
No. F.MEASURED	87	213	187	764	548	14	410	343	487	1326	753	2566	
MEAN LENGTH(cm)	37.3	32.0	33.8	33.8	33.9	32.6	38.1	38.5	32.5	33.9	38.3	34.5	
DEPTH RANGE (m)	437/1018	750/1277	652/932	48/1200	60/1072	990/1074	120/893	61/272	437/1277	48/1200	61/893	48/1277	

TABLE XXXVII-A: THORNY SKATE, DIV. 3O, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	AUG	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
12					13.0			4.4	1.4	12
13										13
14										14
15										15
16										16
17	3.1					2.5			1.1	17
18	3.1		5.1			2.5	5.1		2.3	18
19	7.6	7.0	9.2	1.0	2.0	7.5	9.2	1.3	5.9	19
20	7.6	2.3	67.7	1.1		6.6	67.7	0.7	18.8	20
21	4.5	7.0	30.0			5.0	30.0		9.2	21
22	18.3	25.4	30.1	3.5		19.6	30.1	2.3	16.4	22
23	9.0	15.9	29.4	5.3		10.3	29.4	3.5	12.5	23
24	31.8	25.1	43.3	5.9	16.3	30.5	43.3	9.4	26.6	24
25	14.8	22.8	53.1	1.5		16.3	53.1	1.0	19.8	25
26	22.3	43.4	66.1	7.2	2.0	26.3	66.1	5.4	28.7	26
27	20.3	23.0	72.0	13.0	14.3	20.8	72.0	13.4	30.3	27
28	33.2	48.2	88.6	16.1	13.0	36.0	88.6	15.1	41.3	28
29	10.1	9.2	25.6	7.4	3.8	9.9	25.6	6.2	12.3	29
30	33.1	18.5	69.2	10.2	20.9	30.3	69.2	13.9	33.9	30
31	32.1	21.3	29.1	7.1	31.2	30.1	29.1	15.2	25.0	31
32	41.1	16.4	60.0	15.6	23.8	36.4	60.0	18.4	36.0	32
33	31.4	29.8	40.8	24.9	26.0	31.1	40.8	25.3	31.4	33
34	27.6	34.5	37.6	11.7	46.6	28.9	37.6	23.5	29.2	34
35	25.0	27.7	48.3	32.4	10.7	25.5	48.3	25.1	30.6	35
36	67.5	46.5	70.8	66.7	81.5	63.6	70.8	71.7	67.9	36
37	52.6	56.1	33.7	30.7	63.1	53.2	33.7	41.7	44.9	37
38	93.9	126.6	36.1	145.8	93.3	100.1	36.1	128.1	94.4	38
39	36.9	57.8	28.6	60.3	38.6	40.9	28.6	52.9	42.0	39
40	138.0	148.3	13.2	176.5	131.1	139.9	13.2	161.2	117.6	40
41	60.1	68.8	5.0	129.6	107.9	61.8	5.0	122.2	68.4	41
42	80.1	88.3	7.5	72.5	96.4	81.6	7.5	80.6	64.1	42
43	7.4			28.6	36.3	6.0		31.2	12.8	43
44	61.1	25.4		74.0	57.3	54.3		68.4	46.4	44
45	1.7			28.9	20.3	1.3		26.0	9.1	45
46	11.1	4.9		16.7	44.9	9.9		26.2	12.9	46
47	2.3				5.8	1.9		2.0	1.5	47
48	5.6				3.0		4.5		2.0	48
49					2.4			1.6	0.5	49
50	0.7					0.6			0.2	50
51										51
52	2.9					2.4			1.0	52
53										53
54										54
55	1.5					1.2			0.5	55
56										56
57	0.8					0.6			0.3	57
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	21	4	4	18	8	25	4	26	55	
SAMPLING WEIGHT(kg)	2319	410	314	1753	613	2729	314	2366	5408	
No. F.MEASURED	671	143	182	490	183	814	182	673	1669	
MEAN LENGTH(cm)	36.3	35.8	29.9	39.2	38.5	36.2	29.9	39.0	35.6	
DEPTH RANGE (m)	352/684	388/579	122/207	120/365	143/454	352/684	122/207	120/454	120/684	

TABLE XXXVII-B: THORNY SKATE, DIV. 3O, 2003:
length composition of the 280mm trawl catches.

LENGTH GROUP	APR =YEAR	LENGTH GROUP
22	10.0	22
23	10.0	23
24	10.0	24
25		25
26	20.0	26
27	20.0	27
28	20.0	28
29	30.0	29
30	40.0	30
31	20.0	31
32	30.0	32
33	30.0	33
34	50.0	34
35	40.0	35
36	30.0	36
37	50.0	37
38	70.0	38
39	50.0	39
40	130.0	40
41	80.0	41
42	120.0	42
43	10.0	43
44	50.0	44
45		45
46	10.0	46
47	10.0	47
48	10.0	48
49		49
50	20.0	50
51	10.0	51
52	10.0	52
53		53
54		54
55		55
56		56
57	10.0	57
TOTAL	1000	
No. SAMPLES	1	
SAMPLING WEIGHT(kg)	381	
No. F.MEASURED	100	
MEAN LENGTH(cm)	38.3	
DEPTH RANGE (m)	114/141	

TABLE XXXVIII: SPINYTAIL SKATE, DIV. 3L, 2003: length composition of the trawl catches.

LENGTH GROUP	1st Q.	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
17				45.5	5.9	17
18						18
19						19
20				90.9	11.8	20
21		20.6		45.5	14.6	21
22	58.8	13.9	34.3		23.7	22
23		34.5	17.2		20.6	23
24	58.8	64.4	34.3	45.5	51.0	24
25				45.5	5.9	25
26		94.9			40.3	26
27	58.8	13.9	17.2		17.7	27
28	58.8	37.2		45.5	27.6	28
29	58.8	27.9	34.3	45.5	35.5	29
30		34.5	17.2	45.5	26.5	30
31		43.8	34.3	45.5	36.3	31
32		27.9	34.3	45.5	29.6	32
33	117.6	55.1	34.3	45.5	52.9	33
34		13.9	17.2	136.4	29.6	34
35			60.7		20.9	35
36	117.6	57.7	34.3		48.2	36
37		13.9	34.3	45.5	23.7	37
38	58.8	27.9	17.2		23.7	38
39			34.3	45.5	17.7	39
40		13.9	68.6		29.6	40
41		20.6	43.5		23.7	41
42	58.8		17.2		11.8	42
43		51.1		90.9	33.5	43
44		34.5	17.2		20.6	44
45		13.9	34.3		17.7	45
46			60.7	45.5	26.8	46
47		43.8	43.5		33.6	47
48	58.8	13.9	17.2		17.7	48
49		13.9	69.9		30.0	49
50		20.6	77.8		35.6	50
51	58.8		43.5		20.9	51
52		51.1	17.2	45.5	33.5	52
53						53
54	58.8	20.6			14.6	54
55	58.8	37.2		45.5	27.6	55
56		13.9	17.2		11.8	56
57						57
58		20.6			8.7	58
59	58.8				5.9	59
60			17.2		5.9	60
61						61
62	58.8	13.9			11.8	62
63						63
64						64
65						65
66		13.9			5.9	66
67						67
68		20.6			8.7	68
TOTAL	1000	1000	1000	1000	1000	
No. SAMPLES	2	6	7	3	18	
SAMPLING WEIGHT(kg)	59	203	223	45	530	
No. F.MEASURED	17	57	54	22	150	
MEAN LENGTH(cm)	40.3	38.6	40.6	33.5	38.8	
DEPTH RANGE (m)	905/963	810/1038	710/1097	848/1133	710/1133	

TABLE XXXIX: SPINYTAIL SKATE, DIV. 3M, 2003:
length composition of the trawl catches.

LENGTH GROUP	1st Q. =MAR	2nd Q. =JUN	YEAR	LENGTH GROUP
13	5.8		5.3	13
14				14
15	5.8		5.3	15
16	5.8		5.3	16
17	35.1		31.9	17
18	11.7		10.6	18
19	17.5		16.0	19
20	46.8		42.6	20
21	11.7	117.6	21.3	21
22	35.1		31.9	22
23	11.7	117.6	21.3	23
24	40.9	117.6	47.9	24
25	5.8		5.3	25
26	64.3		58.5	26
27	29.2		26.6	27
28	23.4	117.6	31.9	28
29	58.5		53.2	29
30	70.2		63.8	30
31	29.2		26.6	31
32	29.2	117.6	37.2	32
33	17.5		16.0	33
34	35.1		31.9	34
35	11.7	58.8	16.0	35
36	40.9		37.2	36
37	17.5		16.0	37
38	29.2		26.6	38
39	29.2		26.6	39
40	29.2		26.6	40
41	29.2		26.6	41
42	17.5		16.0	42
43	5.8		5.3	43
44	5.8		5.3	44
45				45
46				46
47	5.8		5.3	47
48	5.8		5.3	48
49	11.7		10.6	49
50	5.8	117.6	16.0	50
51	5.8		5.3	51
52	17.5		16.0	52
53		117.6	10.6	53
54	5.8	58.8	10.6	54
55	5.8		5.3	55
56	17.5	58.8	21.3	56
57	5.8		5.3	57
58		11.7	10.6	58
59				59
60				60
61	11.7		10.6	61
62	11.7		10.6	62
63	11.7		10.6	63
64				64
65				65
66	5.8		5.3	66
67				67
68				68
69				69
70	5.8		5.3	70
71	11.7		10.6	71
72	5.8		5.3	72
73				73
74	11.7		10.6	74
75				75
76	5.8		5.3	76
77				77
78				78
79				79
80				80
81	5.8		5.3	81
82				82
83				83
84				84
85				85
86				86
87				87
88	5.8		5.3	88
TOTAL		1000	1000	1000
No. SAMPLES	13	1	14	
SAMPLING WEIGHT(kg)	494	52	546	
No. F.MEASURED	171	17	188	
MEAN LENGTH(cm)	36.0	36.2	36.0	
DEPTH RANGE (m)	839/1021	1045/1117	839/1117	

TABLE XL: SPINYTAIL SKATE, DIV. 3N, 2003:
length composition of the trawl catches.

LENGTH GROUP	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
18			45.5	3.1	18
19					19
20					20
21	10.9	9.5		9.2	21
22		9.5	45.5	9.2	22
23		4.7		3.1	23
24	10.9	9.5		9.2	24
25	10.9	9.5	45.5	12.3	25
26		14.2		9.2	26
27		9.5	45.5	9.2	27
28		4.7	45.5	6.2	28
29	10.9	19.0	90.9	21.5	29
30	10.9	4.7	45.5	9.2	30
31		14.2		9.2	31
32	43.5	9.5		18.5	32
33	21.7	9.5	45.5	15.4	33
34	21.7	9.5	90.9	18.5	34
35					35
36	32.6	33.2		30.8	36
37	21.7	4.7	90.9	15.4	37
38	21.7	37.9	45.5	33.8	38
39	21.7	23.7	45.5	24.6	39
40	10.9			3.1	40
41	43.5	4.7		15.4	41
42	21.7	19.0	136.4	27.7	42
43	32.6	4.7		12.3	43
44	54.3	33.2		36.9	44
45	10.9	9.5		9.2	45
46		14.2		9.2	46
47	32.6	52.1		43.1	47
48	43.5	33.2		33.8	48
49	32.6	42.7		36.9	49
50	54.3	61.6		55.4	50
51	21.7	33.2		27.7	51
52	54.3	28.4		33.8	52
53	43.5	23.7		27.7	53
54	32.6	19.0	45.5	24.6	54
55	10.9	33.2		24.6	55
56	32.6	47.4		40.0	56
57	10.9	42.7		30.8	57
58	54.3	42.7		43.1	58
59	21.7	4.7		9.2	59
60	10.9	42.7		30.8	60
61	10.9	23.7	45.5	21.5	61
62	32.6	19.0		21.5	62
63	10.9	19.0		15.4	63
64		28.4		18.5	64
65		4.7		3.1	65
66	10.9	14.2		12.3	66
67		14.2		9.2	67
68	10.9	23.7		18.5	68
69	10.9	4.7		6.2	69
70		9.5		6.2	70
71					71
72	10.9			3.1	72
73		4.7		3.1	73
74		4.7	45.5	6.2	74
75					75
76					76
77			45.5	3.1	77
78	10.9			3.1	78
79	10.9			3.1	79
80					80
81					81
82					82
83					83
84					84
85					85
86	10.9			3.1	86
TOTAL	1000	1000	1000	1000	
No. SAMPLES	9	32	3	44	
SAMPLING WEIGHT(kg)	532	1327	70	1929	
No. F.MEASURED	92	211	22	325	
MEAN LENGTH(cm)	48.9	49.8	39.2	48.8	
DEPTH RANGE (m)	437/1018	697/1200	730/893	437/1200	

TABLE XLI: MONKFISH, DIV. 3N, 2003: length composition of the trawl catches.

LENGTH GROUP	AUG	OCT	NOV	3rd Q.	4th Q.	YEAR	LENGTH GROUP
21			19.3		9.1	4.6	21
22							22
23							23
24							24
25							25
26							26
27							27
28							28
29							29
30		9.4			5.0	2.5	30
31							31
32		6.8			3.6	1.8	32
33			19.3		9.1	4.6	33
34			27.0		12.7	6.4	34
35		29.3			15.5	7.8	35
36	25.0	7.5		25.0	4.0	14.4	36
37							37
38	17.6	38.7		17.6	20.5	19.1	38
39		23.7	37.3		30.1	15.2	39
40	29.5	7.5		29.5	4.0	16.6	40
41	18.3	9.4	44.1	18.3	25.8	22.1	41
42	49.2	16.4		49.2	8.7	28.8	42
43	5.3		6.3	5.3	3.0	4.1	43
44	43.3	98.5	37.0	43.3	69.5	56.5	44
45	17.6			17.6		8.7	45
46	76.8	28.3		76.8	15.0	45.6	46
47	36.0	19.7	17.4	36.0	18.6	27.2	47
48	25.2	103.1	58.9	25.2	82.2	54.0	48
49	25.0	34.4		25.0	18.2	21.6	49
50	36.0	93.5	17.4	36.0	57.6	46.9	50
51	59.1	65.3	19.9	59.1	43.9	51.4	51
52	35.3	30.6	18.3	35.3	24.8	30.0	52
53	48.7	34.3	77.1	48.7	54.5	51.6	53
54	40.3	16.4		40.3	8.7	24.3	54
55	60.2	55.8	33.4	60.2	45.2	52.6	55
56	47.1	60.7	72.6	47.1	66.3	56.8	56
57	36.7	16.4	64.3	36.7	39.0	37.9	57
58	57.1		6.3	57.1	3.0	29.8	58
59	25.0	12.0	29.0	25.0	20.0	22.5	59
60	24.2	14.3	72.6	24.2	41.7	33.0	60
61	18.3	40.0	17.1	18.3	29.2	23.8	61
62	39.5	23.9	70.7	39.5	45.9	42.7	62
63			11.9		5.6	2.8	63
64	18.3	23.2		18.3	12.3	15.3	64
65		15.1	17.4		16.2	8.2	65
66	10.0	9.4	73.4	10.0	39.6	24.9	66
67			6.3		3.0	1.5	67
68		4.4	19.9		11.7	5.9	68
69		25.8	56.4		40.2	20.3	69
70		18.8	11.9		15.5	7.8	70
71		5.3		6.3	5.3	4.1	71
72							72
73		27.6			27.6		73
74							74
75							75
76	18.3	7.5	19.3	18.3	13.1	15.7	76
77							77
78	24.2				24.2		78
79							79
80			11.9		5.6	2.8	80
TOTAL	1000	1000	1000	1000	1000	1000	
No. SAMPLES	6	9	7	6	16	22	
SAMPLING WEIGHT(kg)	249	347	285	249	632	880	
No. F.MEASURED	59	91	60	59	151	210	
MEAN LENGTH(cm)	53.4	51.5	55.7	53.4	53.5	53.4	
MEAN WEIGHT (g)	3840	3453	4403	3840	3900	3870	
DEPTH RANGE (m)	63/307	150/450	69/300	63/307	69/450	63/450	

TABLE XLII: MONKFISH, DIV. 3O, 2003: length composition of the trawl catches.

LENGTH GROUP	APR	MAY	AUG	OCT	NOV	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
22		17.3				3.1			1.6	22
23										23
24		12.3				10.1			5.2	24
25										25
26	6.8	17.3				8.7			4.5	26
27										27
28	2.9					2.4			1.2	28
29	12.5				5.6	10.3		1.4	5.8	29
30	16.5	42.8				21.2			10.9	30
31	6.8	12.1				7.8			4.0	31
32	5.3	36.5	14.0			10.8	14.0		6.8	32
33	5.4	12.1	8.2	9.4		6.6	8.2	7.1	6.9	33
34	5.4	15.1		5.2		7.1		3.9	5.2	34
35	13.1		9.3			10.8		7.0	8.3	35
36	26.2	17.3	14.0	26.9		24.6	14.0	20.2	21.9	36
37	13.0	36.5	29.0	9.3	15.2	17.2	29.0	10.8	15.7	37
38	22.3			17.2	10.4	18.4		15.5	15.6	38
39	43.2	17.3		16.0		38.6		12.0	24.6	39
40	35.5	56.1	53.6	10.2	40.5	39.1	53.6	17.7	32.0	40
41	19.1	12.1	8.2			17.9	8.2		9.9	41
42	21.5			20.3	39.6	17.7		25.1	19.0	42
43	18.2	21.4	10.6	20.8	12.9	18.8	10.6	18.8	18.1	43
44	63.0	59.7	38.5	22.8	40.4	62.4	38.5	27.1	46.3	44
45	10.9		66.6	48.8	8.5	8.9	66.6	38.8	26.0	45
46	42.2	63.0	35.2	28.2	13.9	45.9	35.2	24.6	36.5	46
47	44.2	12.1	45.3	22.0	25.5	38.5	45.3	22.9	33.0	47
48	35.9	75.2	22.1	44.7	52.2	42.9	22.1	46.5	42.4	48
49	37.3	56.1	37.2	59.9	5.2	40.6	37.2	46.3	42.5	49
50	40.2	45.6	80.5	94.7	24.8	41.1	80.5	77.3	59.0	50
51	3.8	15.1	59.7	42.4	68.1	5.8	59.7	48.8	27.7	51
52	54.4	29.5	22.1	51.8	17.5	50.0	22.1	43.2	44.8	52
53	18.1	21.4	64.1	39.0	45.8	18.7	64.1	40.7	31.5	53
54	36.7	15.1	51.1	37.4	8.5	32.9	51.1	30.2	33.5	54
55	32.3	29.5	16.3	55.1	89.6	31.8	16.3	63.7	42.9	55
56	6.1	21.4	32.7	63.2	5.6	8.8	32.7	48.9	26.8	56
57	34.4	17.3		12.0	59.4	31.4		23.7	25.5	57
58	13.1	21.4	51.1		25.7	14.6	51.1	6.4	14.7	58
59	29.7	15.1		28.7	85.4	27.1		42.8	30.8	59
60	33.5	27.2	69.9	34.9	33.8	32.4	69.9	34.6	36.7	60
61	28.3		14.0	16.6	15.2	23.2	14.0	16.3	19.7	61
62	15.2	50.8	39.6	21.1	48.8	21.6	39.6	28.0	25.7	62
63	32.3			31.4	5.2	26.6		24.9	23.5	63
64	14.3	15.1		29.1	11.9	14.4		24.8	17.2	64
65			8.2	9.3	38.6		8.2	16.6	7.3	65
66	8.9	38.7	43.0	21.5	14.0	14.2	43.0	19.7	19.0	66
67	11.8				27.8	9.7		6.9	7.7	67
68	7.4	12.1	14.0	1.9	21.6	8.2	14.0	6.8	8.2	68
69	2.9	17.3		11.8		5.5		8.9	6.3	69
70	1.7	15.1		4.4	5.6	4.1		4.7	4.0	70
71	3.2					2.6			1.3	71
72	19.2		14.0	3.6	5.2	15.8	14.0	4.0	11.0	72
73	4.9	12.1		9.4	8.5	6.2		9.2	6.8	73
74										74
75					12.9			3.2	1.3	75
76	1.7			3.0		1.4		2.2	1.6	76
77	3.7			6.7	19.9	3.0		10.0	5.5	77
78	7.2		18.8			5.9	18.8		4.8	78
79	2.1				5.6	1.8		1.4	1.5	79
80	3.7		8.2		12.6	3.0	8.2	3.1	3.5	80
81			10.6		12.9		10.6	3.2	2.2	81
82	2.7					2.2			1.1	82
83										83
84										84
85										85
86	3.4					2.8			1.4	86
87	3.7					3.0			1.5	87
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	19	4	4	16	11	23	4	27	54	
SAMPLING WEIGHT(kg)	963	217	307	675	414	1179	307	1089	2576	
No. F.MEASURED	246	60	75	173	84	306	75	257	638	
MEAN LENGTH(cm)	50.4	48.6	52.9	52.5	56.1	50.1	52.9	53.4	51.6	
MEAN WEIGHT (g)	3445	3117	3777	3627	4420	3387	3777	3824	3595	
DEPTH RANGE (m)	365/821	412/657	166/571	144/360	122/421	365/821	166/571	122/421	122/821	

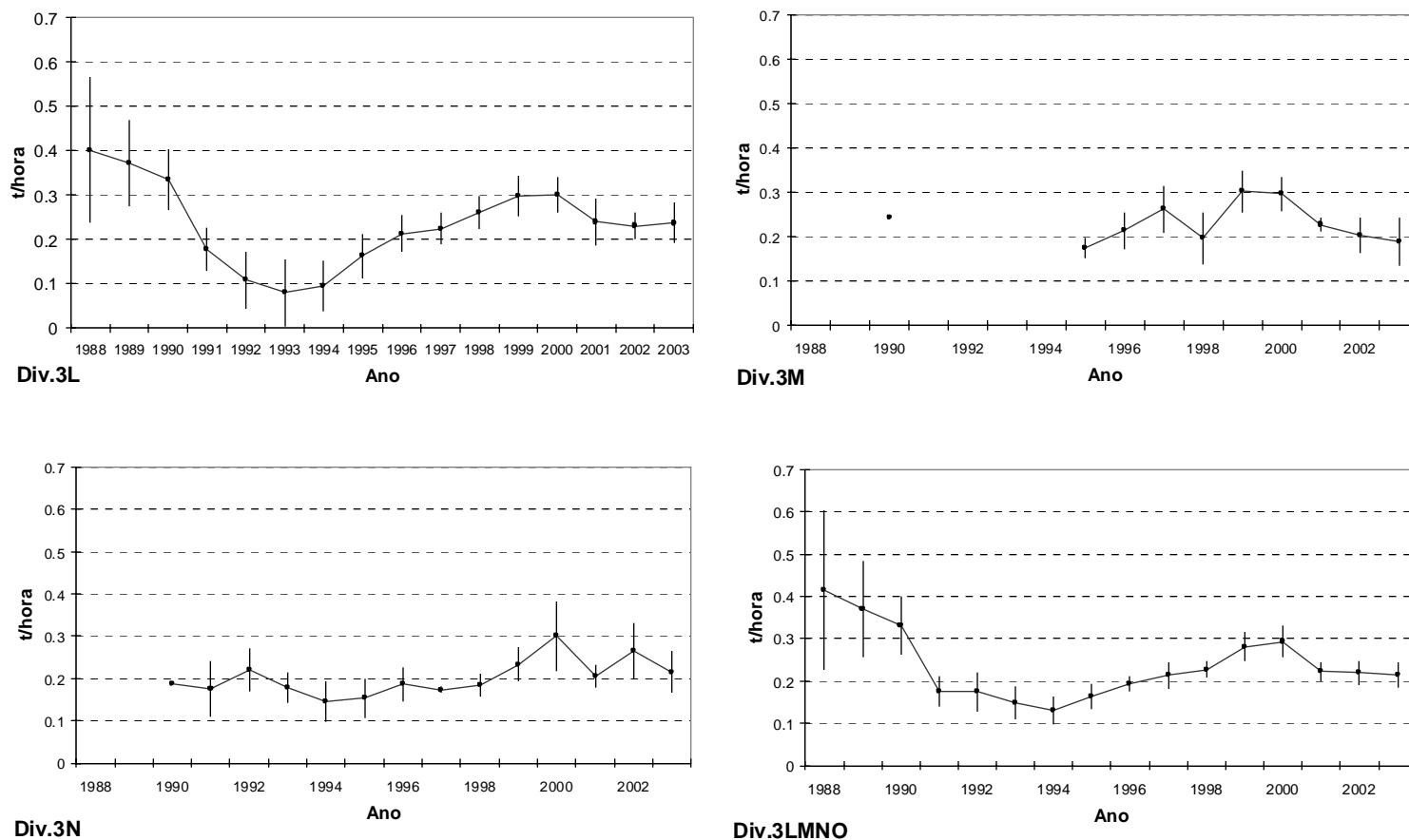


Fig. 1: Greenland halibut trawl catch rates by division, 1988 - 2003.

Fig. 2 - Annual length composition of Cod on Division 3N trawl fishery in 2003.

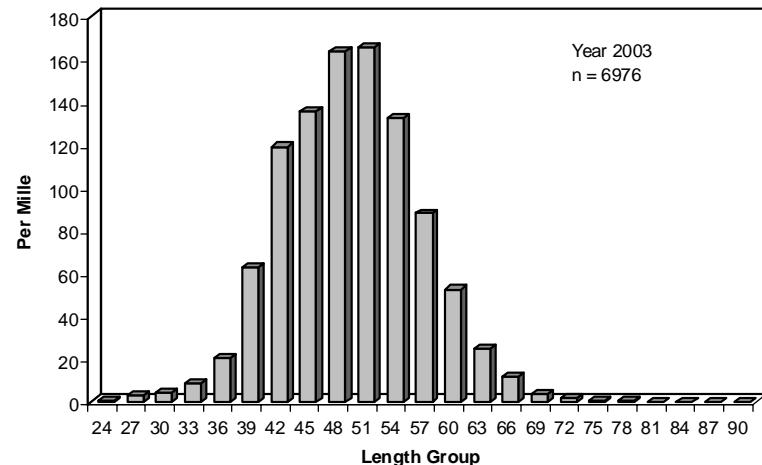


Fig. 3 - Annual length composition of Cod on Division 3O trawl fishery in 2003.

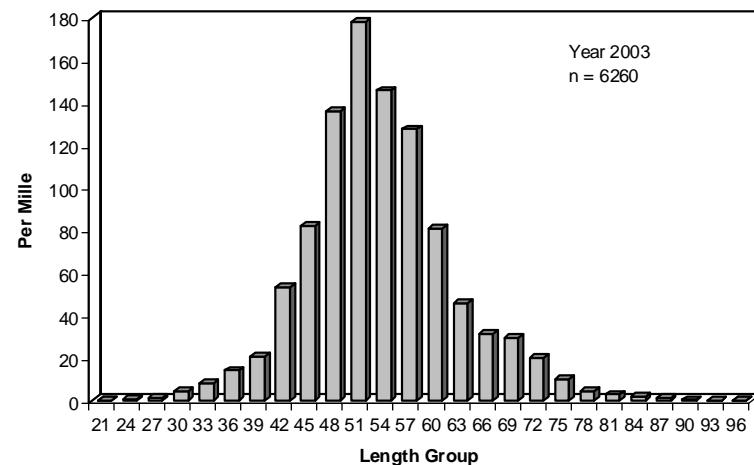


Fig. 4 - Annual length composition of Redfish (*S. mentella*) on Division 3L trawl fishery in 2003.

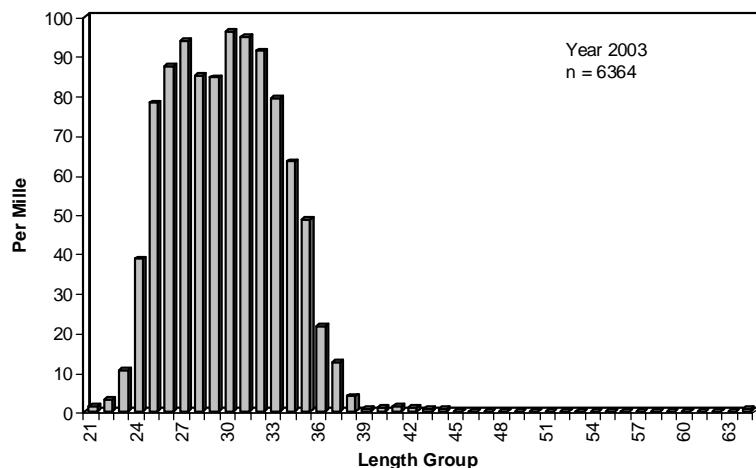


Fig. 5 - Annual length composition of Redfish (*S. mentella*) on Division 3M trawl fishery in 2003.

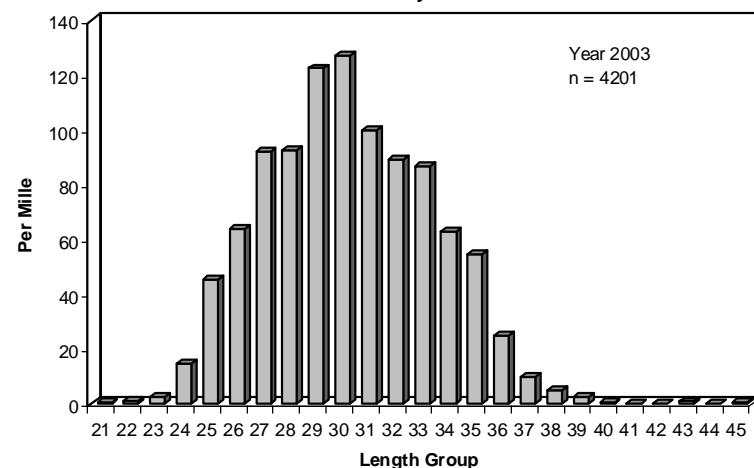


Fig. 6 - Annual length composition of Redfish (*S. mentella*) on Division 3N trawl fishery in 2003.

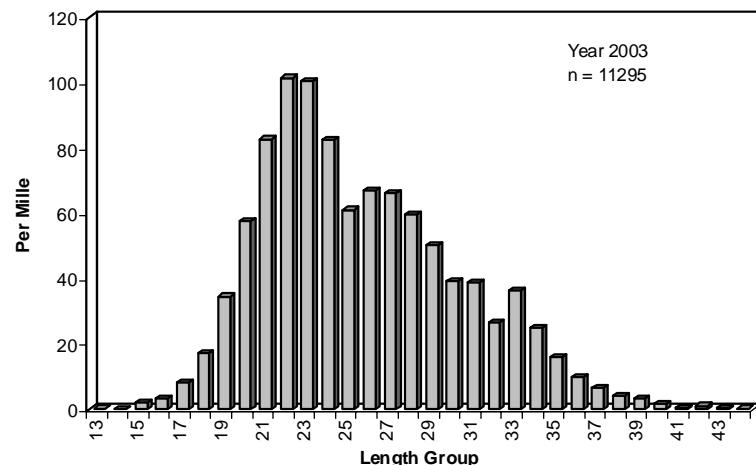


Fig. 7 - Annual length composition of Redfish (*S. mentella*) on Division 3O trawl fishery in 2003.

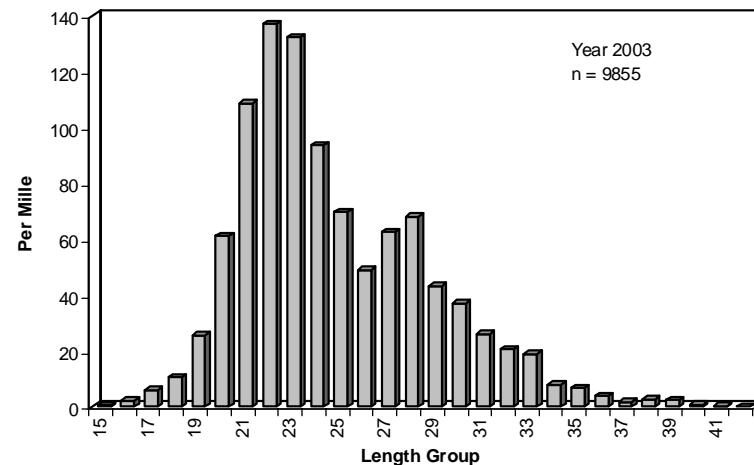


Fig. 8 - Annual length composition of Redfish (*S. marinus*) on Division 3N trawl fishery in 2003.

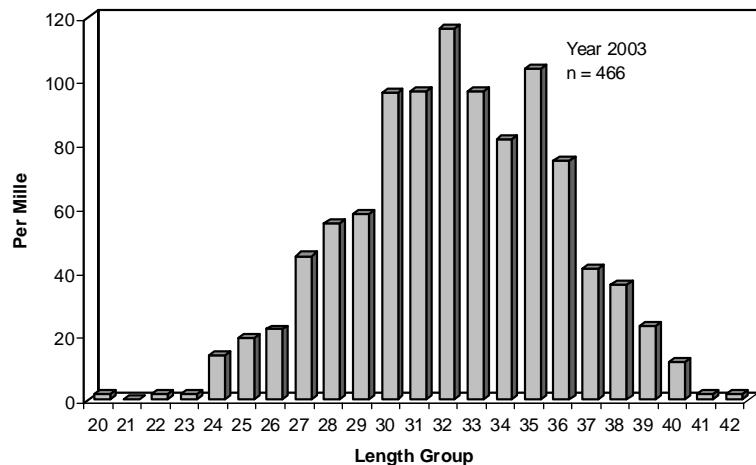


Fig. 9 - Annual length composition of Yellowtail flounder on Division 3N trawl fishery in 2003.

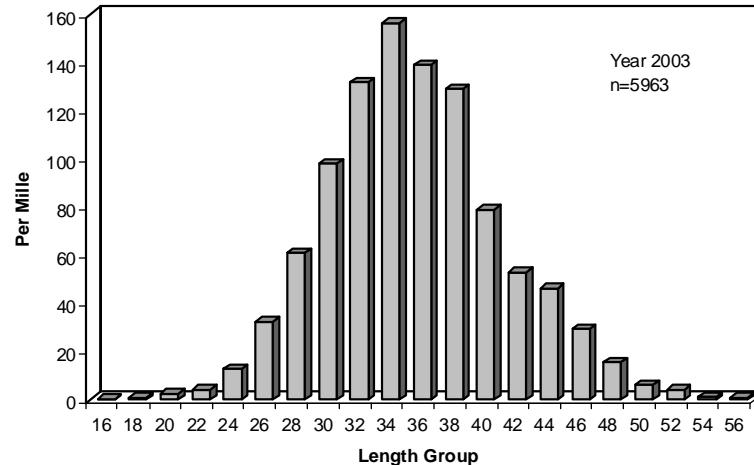


Fig. 10 - Annual length composition of America plaice on Division 3L trawl fishery in 2003.

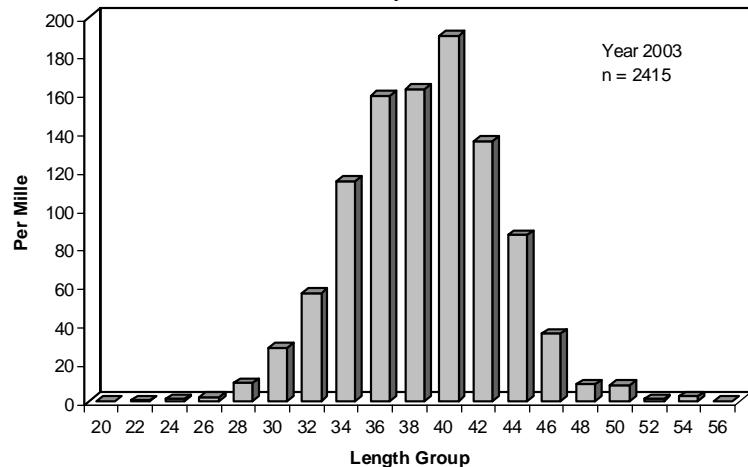


Fig. 11 - Annual length composition of American plaice on Division 3M trawl fishery in 2003.

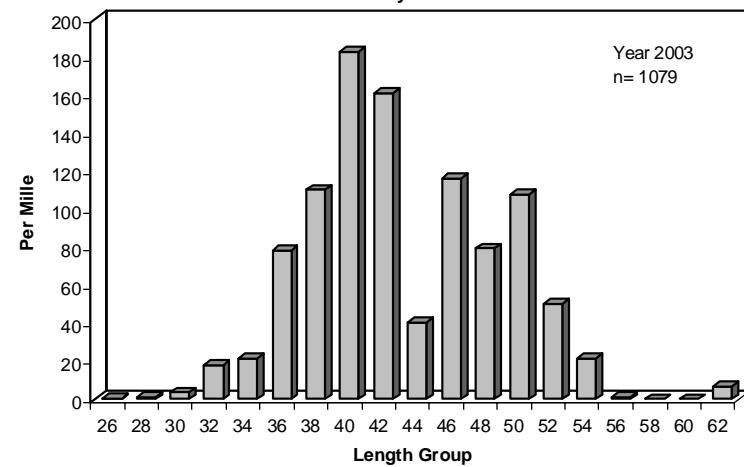


Fig. 12 - Annual length composition of American plaice on Division 3N trawl fishery in 2003.

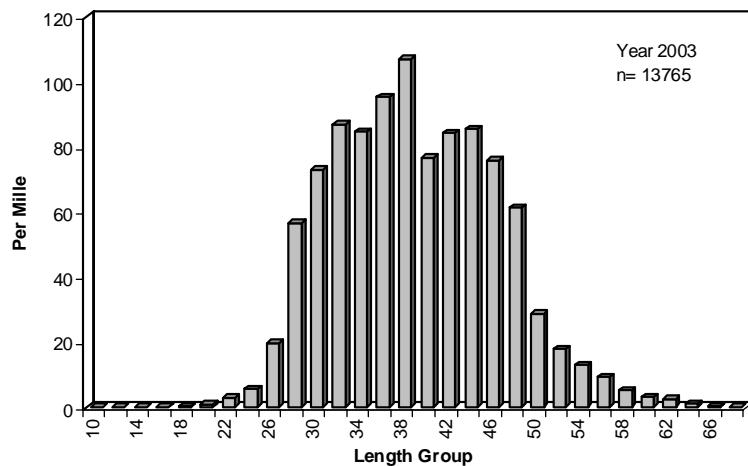


Fig. 13 - Annual length composition of American plaice on Division 3O trawl fishery in 2003.

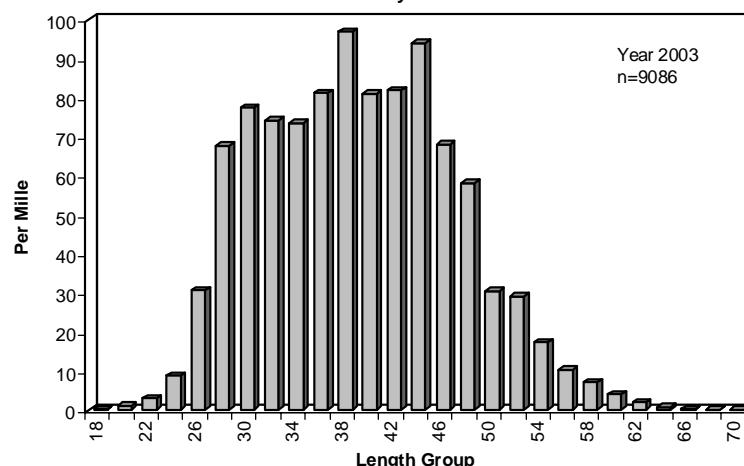


Fig. 14 - Annual length composition of Greenland halibut on Division 3L trawl fishery in 2003.

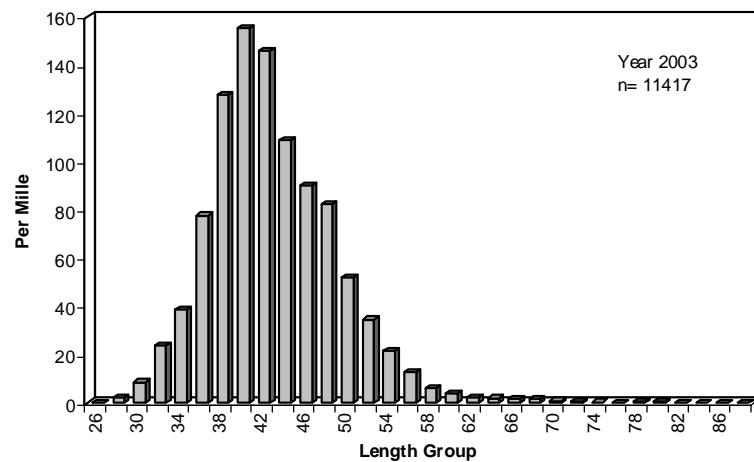


Fig. 15 - Annual length composition of Greenland halibut on Division 3M trawl fishery in 2003.

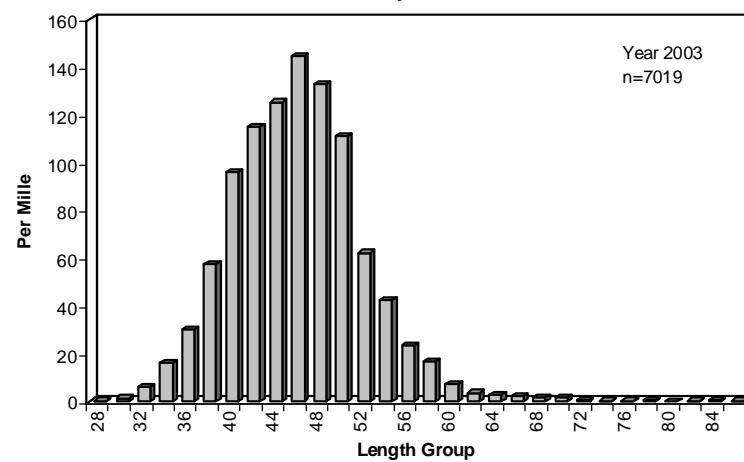


Fig. 16 - Annual length composition of Greenland halibut on Division 3N trawl fishery in 2003.

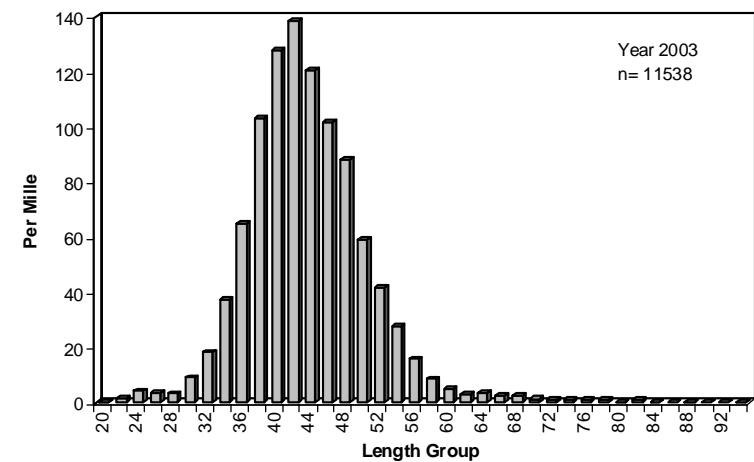


Fig. 17 - Annual length composition of Greenland halibut on Division 3O trawl fishery in 2003.

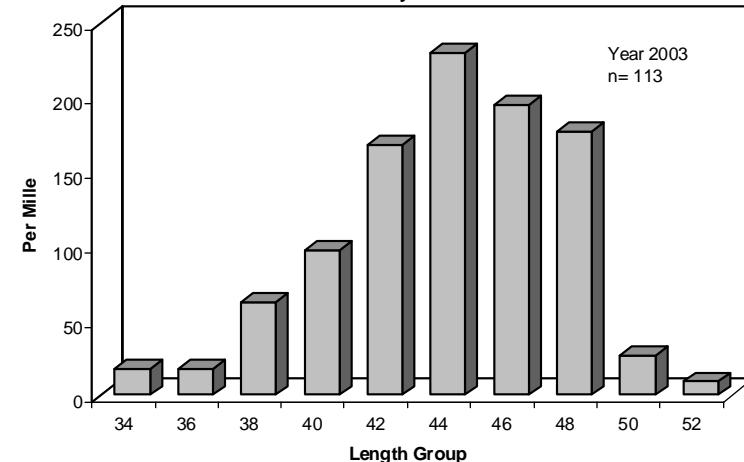


Fig. 18 - Annual length composition of Roughhead grenadier on Division 3L trawl fishery in 2003.

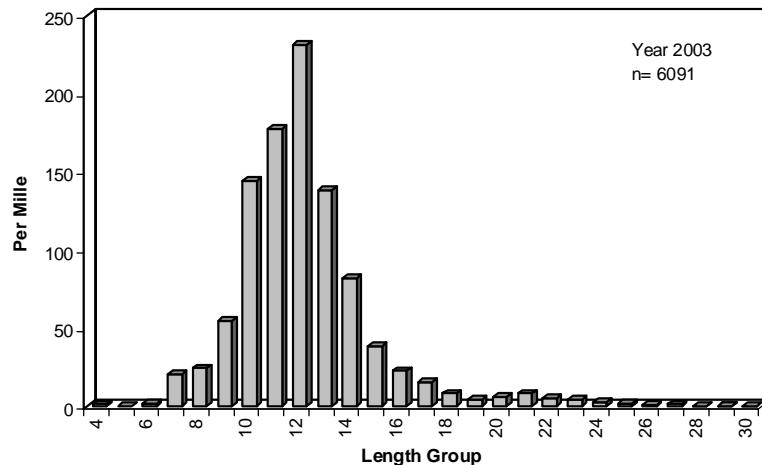


Fig. 19 - Annual length composition of Roughhead grenadier on Division 3M trawl fishery in 2003.

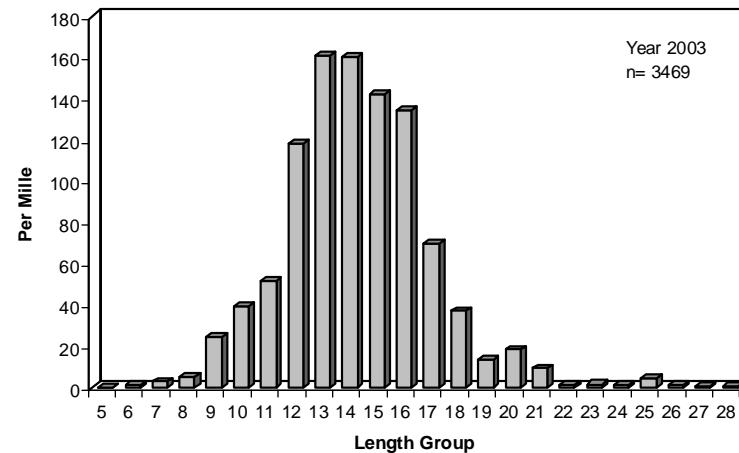


Fig. 20 - Annual length composition of Goughhead grenadier on Division 3N trawl fishery in 2003.

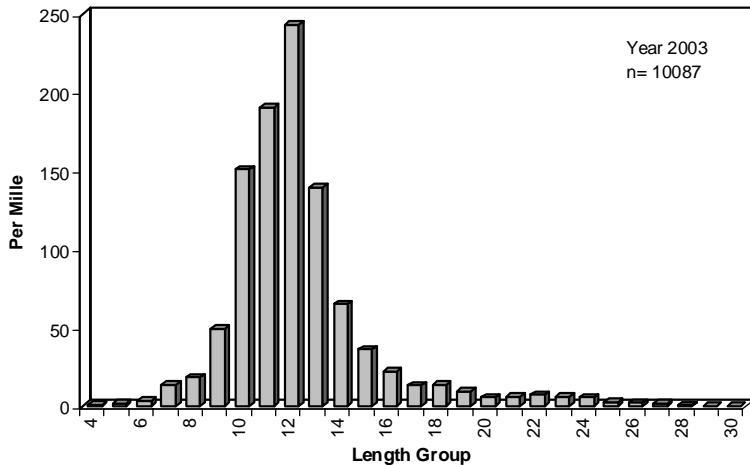


Fig. 21 - Annual length composition of Roughhead grenadier on Division 3O trawl fishery in 2003.

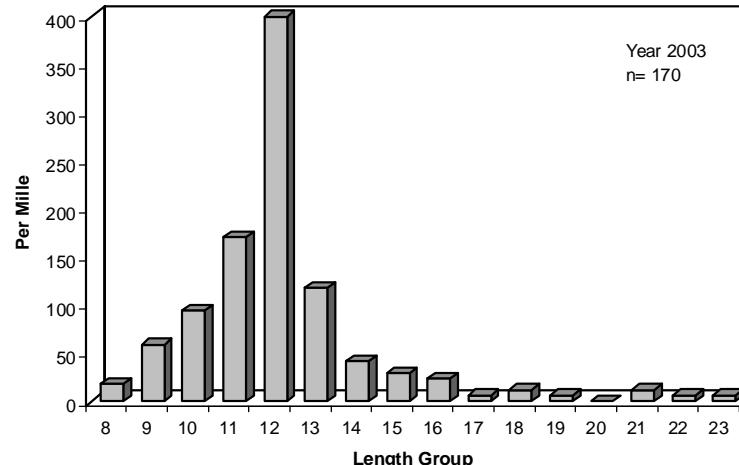


Fig. 22 - Annual length composition of Witch flounder on Division 3L trawl fishery in 2003.

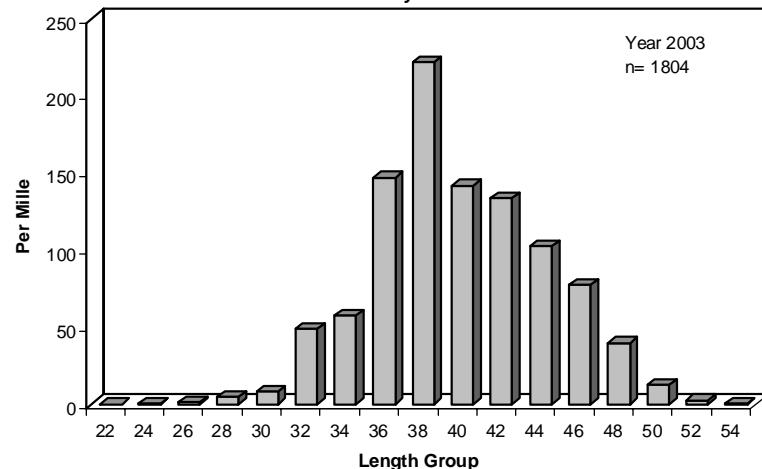


Fig. 23 - Annual length composition of Witch flounder on Division 3M trawl fishery in 2003.

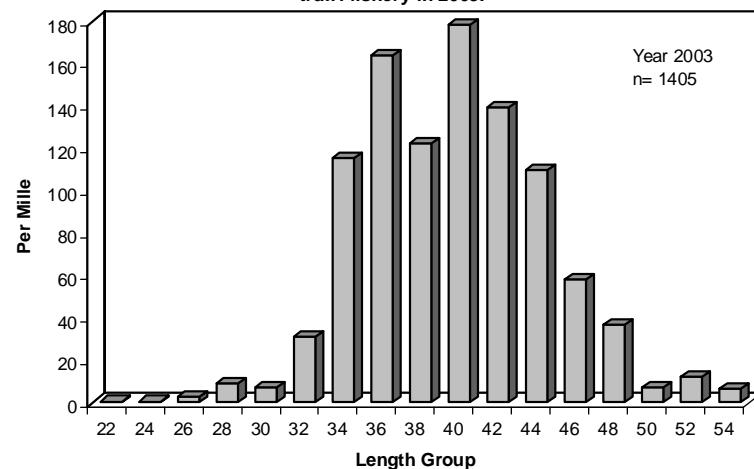


Fig. 24 - Annual length composition of Witch flounder on Division 3N trawl fishery in 2003.

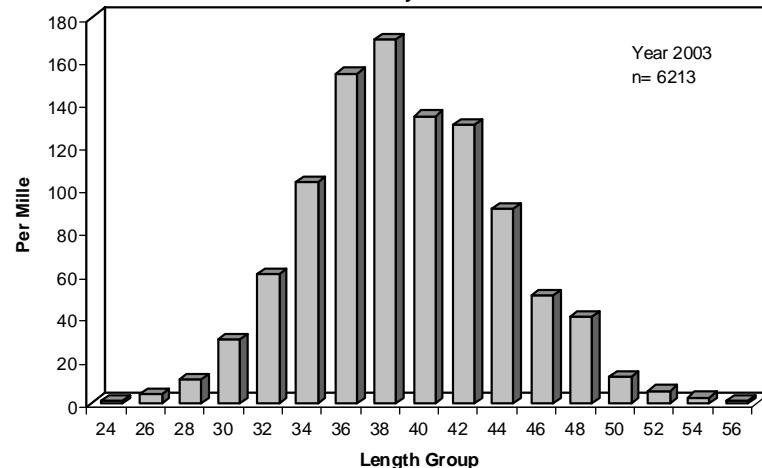


Fig. 25 - Annual length composition of Witch flounder on Division 3O trawl fishery in 2003.

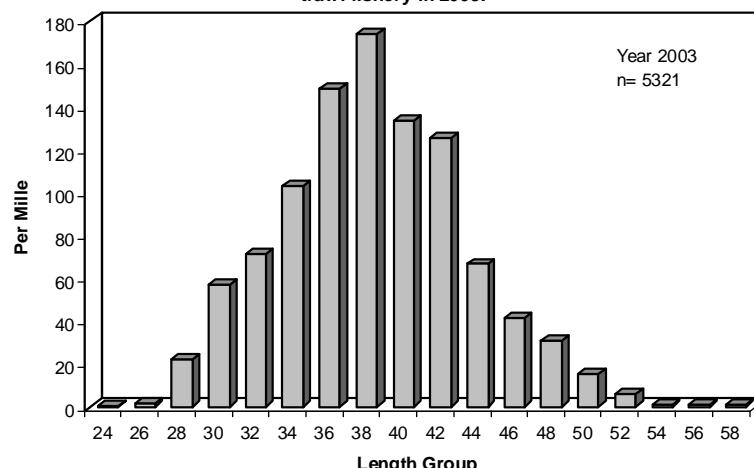


Fig. 26 - Annual length composition of White hake on Division 3N trawl fishery in 2003.

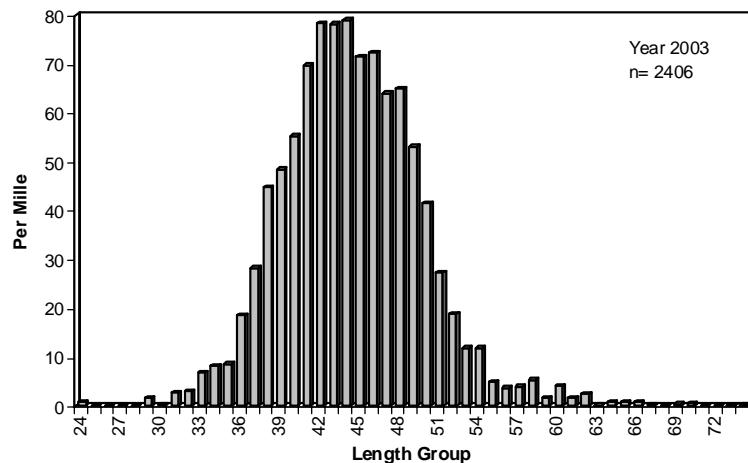


Fig.27 - Annual length composition of White hake on Division 3O trawl fishery in 2003.

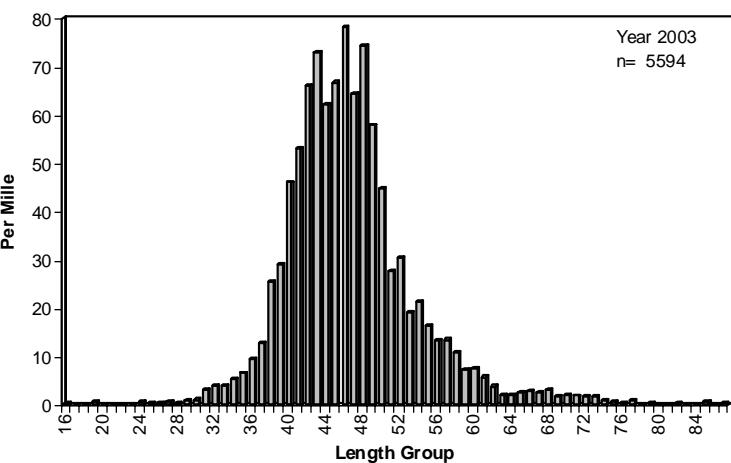


Fig. 28 - Annual length composition of Monkfish on Division 3N trawl fishery in 2003.

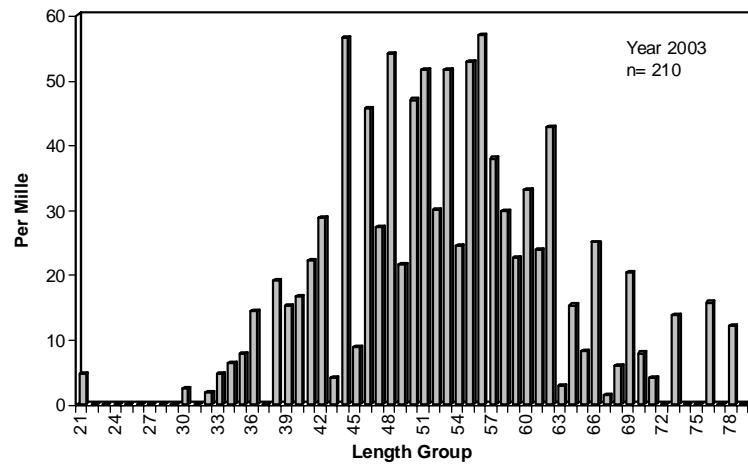


Fig. 29- Annual length composition of Monkfish on Division 3O trawl fishery in 2003.

