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PORTUGUESE RESEARCH REPORT FOR 2009

by

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A. Status of the fisheries

In 2009, the Portuguese provisional nominal catches proceeding from NAFO Regulatory Sub Area 3 have reached 15 42 ton (Table 1-A), the highest value since 2003. Over recent years, nominal catches increased continuously from 2000 to 2003, when they peak at 21 300 ton, but declined sharply afterwards; between 2004 and 2008 become stable between 11 500-13 000 ton (Table I-B).

From 2008 to 2009, the raise in the catches is due, essentially, to an increase around 23% in the total fishing effort, both in fishing days and fishing hours. This increase was in Div.3L and 3M, in Div. 3O the effort remains stable and in Div. 3N decreased around 15% (Table II). In 2009, 11 trawlers composed the Portuguese fleet that operated in the NAFO area.

By the second consecutive year, the catch of redfish in Div. 3M raised (around 5%) and, in the last year, the total catch of this specie in NAFO Sub Area 3 increased around 10%. Redfish continues to be by far the most important species in the Portuguese commercial catches from Sub Area 3, representing in recent years more than 50% of the overall catch. Also in Div. 3M, the by-catch of cod tripled in 2009, after an increase of almost five times in 2008, cod Sub Area 3 catch doubled again in 2009. The total by-catch of witch flounder fell by half (returning to 2007 values), the by-catch of yellowtail flounder also fell by almost half in 2009 and the by-catch American plaice decrease again 20%. The roughhead grenadier catch doubled and in 2009 the fishery of shrimp in Div. 3L recorded 320 ton. The catches of all others species remains more or less stables.

The total catches increased almost 20% in Div. 3M and represent, in 2009, 45% of the total catch, being at the moment the most important ground for the Portuguese fishery. In both Div. 3M and 3O, redfish is the most important fishery with an average of 76% of the total catches in each division.

The Greenland halibut catches decreased 20% in Div. 3L, increased in Div. 3M and Div. 3N, but in the Div. 3O increase in 2009 to 270 t (11t in 2008). In Div. 3L, due to the decrease of redfish catch from 2008 to 2009, the bulk of the catch is again represented by Greenland halibut and roughhead grenadier (around 76%) and shrimp catches represent 18% of the Div. 3L catches. In Div. 3N the relative weight of Greenland halibut and roughhead grenadier declined from 76% in 1998 to 35% in 2004-2005 and in the period 2006-2009 this relative weight vary between 4 and 14%. In this division, skates continue to be the most important fishery, with 50-70% of total catch in the last four years (37% in 2005). However, the catches of American plaice and yellowtail flounder decreased in 2009, reaching an average of 14% of total catch in Div. 3N.

B. Portuguese Annual Sampling Program

1. Catch and effort sampling.

Effort and CPUE data for 2009 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 in days and hours were supplied by the Portuguese administration, changes in the administration database make it possible since 2009 (Table II-A/B).

The daily catch and effort data from the logbook 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. From the data available the majority of the fishing effort was directed towards Greenland halibut and redfish. Data regarding directed effort and catch rates of the Greenland halibut fishery are presented in Table III to IV-B and Fig. 1.

The Greenland halibut CPUE series was updated with the 2009 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, but excluding the vessel factor because the sampling program in recent years was carried out on vessels that were not sampled before. If the vessel factor is applied these new vessels will increased a lot the noised. Because they are the only vessels sampled in the recent years, we assumed that all vessels belong to the same category what is realistic. 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, 3N and 3O

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. Between 1991 and 1994 catch rates remained stable at a low level. Since then, catch rates gradually increased, reaching an upper level in 1999-2000. Catch rates declined in 2001 and remained stable at that lower level in 2002 and 2003. In 2004 the catch rates decline again, reaching the lowest value since 1994. However, after 2004 the Greenland halibut catch rates in Div. 3L recovered continuously (except in 2008) and in 2009 reached a value never observed (0.704 ton/h) since the monitory of this fishery.

Div. 3M also show an increase from 2004 to 2009 being at the higher level observed in this division.

For all Div.3LMNO 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 2009, biological sampling was obtained from two stern trawlers 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.

Redfish (*S. mentella)*, American plaice, Greenland halibut, roughhead grenadier and thorny skate were sampled in Div. 3L, 3M, 3N and 3O (Tab. V). Cod was sampled in Div. 3M, 3N and 3O. Spinytail skate was sampled in Div. 3L, 3M and 3N. Witch flounder was sampled in Div. 3L and 3O. Atlantic halibut was sampled in Div. 3N and 3O.

Redfish (*S. marinus*) and haddock were sampled only in Div. 3M, yellowtail flounder only in Div. 3N and white hake only in Div. 3O.

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, white hake, Atlantic halibut, skates and haddock. Mean weight and mean weight in the catch are derived from the length-weight relationships calculated from the commercial sampling in 2009 (Table VI). However, due the low level of the sampling during 2009, for 3N yellowtail flounder the length-weight relationships are the same used for 2007 (Vargas *et al*, 2008).

2.1. Length composition of the 2009 trawl fishery (130mm codend mesh size).

The regular mesh size in the codend used by the monitored trawlers fishing groundfish was the 130mm and when the mesh size is not mentioned it means that the sample refers to the 130mm mesh size. Nevertheless some sets in Div. 3N were made with a skate trawl net with 280mm mesh size in the codend, representing 78% in Div.3N of the total effort sampled. In these sets the main species were sampled. The size of these catches within the overall sampled catch in Div. 3N is about 70% for cod, 62% for American plaice, 83% for yellowtail flounder and 91% for thorny skate.

2.1.1. Cod Div. 3M

Information on length composition of the cod by-catch in Div. 3M is available from March to September (Table VII-A, Fig. 2), from 28 m to 492 m depth.

Lengths between 51 cm and 66 cm dominated the catch, with a modal class at 60 cm (mean length and weight of 62.1 cm and 2691 g).

The age–length key is presented in Table VII-B.

2.1.2. Cod Div. 3N

Information on length composition of the cod by-catch in Div. 3N is available for March, April and September (Table VIII-A, Fig. 3A), from 116 m to 1183 m depth.

Lengths at 30 cm and between 39 cm and 48 cm dominated the catch, with a modal class at 45 cm (mean length and weight of 42.2 cm and 893 g).

2.1.3. Cod Div. 3N **(280mm codend mesh size)**

Information on length composition of the 280mm mesh size cod by-catch in Div. 3N is available for May, August and September (Table VIII-B, Fig. 3B), from 42 m to 72 m depth.

Lengths at 51 cm, 60 cm and 63 cm dominated the catch, without a clear modal class (mean length and weight of 58.5 cm and 2530 g).

2.1.4. Cod Div. 3O

Information on length composition of the cod by-catch in Div. 30 is available between March and September, except for June and July (Table IX, Fig. 4), from 95 m to 591 m depth.

Lengths between 39 cm and 45 cm dominated the catch, with a clear modal class at 42 cm (mean length and weight of 43 cm and 913 g).

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

Information on length composition of the redfish (*S. mentella)* trawl by-catch in Div. 3L is available for April, May, July and September (Table X, Fig. 5), from 852 m to 1293 m depth.

Lengths between 31 cm and 33 cm dominated the catch, with a modal class at 32 cm (mean length and weight of 31.1 cm and 466 g).

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

Information on length composition of the redfish (*S. mentella)* trawl catch in Div. 3M is available from March to October, except June (Table XI, Fig. 6), from 28 m to 1170 m depth.

Lengths between 24 cm and 28 cm dominated the catch, with two modal classes at 25 cm and 26 cm (mean length and weight of 27.1 cm and 316 g).

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

Information on length composition of the redfish (*S. mentella)* trawl by-catch in Div. 3N is available for March, April and August (Table XII, Fig. 7), from 322 m to 1183 m depth.

Lengths between 21 cm and 23 cm dominated the catch, with a modal class at 23 cm (mean length and weight of 23.2 cm and 178 g).

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

Information on length composition of the redfish (*S. mentella)* trawl catch in Div. 3O is available from March to September, except for June and July (Table XIII, Fig. 8), from 278 m to 585 m depth.

Lengths between 17 cm and 23 cm dominated the catches, with a clear modal class at 18 cm (mean length and weight of 21.3 cm and 150 g).

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

Information on length composition of the redfish (*S. marinus)* trawl catch in Div. 3M is available from March to June (Table XIV, Fig. 9), from 275 m to 330 m depth.

Lengths between 27 cm and 31 cm dominated the catch, with a two modal classes at 28 cm and 29 cm (mean length and weight of 29.3 cm and 385 g).

2.1.10. American plaice Div. 3L

Information on length composition of the American plaice by-catch in Div. 3L is available from February to April (Table XV, Fig. 10), from 840 m to 982 m depth.

Lengths at 30 cm, 32 cm and between 36 cm and 40 cm dominated the catch (mean length and weight of 37.3 cm and 553 g).

2.1.11. American plaice Div. 3M

Information on length composition of the American plaice by-catch in Div. 3M is available only for March (Table XVI, Fig. 11), from 879 m to 1003 m depth.

Despite the small sampling (1 sample, 77 fish measured), the data shows that the lengths between 36 and 42 cm dominated the catch (mean length and weight of 41.6 cm and 652 g).

2.1.12. American plaice Div. 3N

Information on length composition of the American plaice by-catch in Div. 3N is available for September (Table XVII-A, Fig. 12A), from 116 m to 124 m depth.

Despite the small sampling (1 sample, 204 fish measured), the data shows that the lengths between 34 cm and 38 cm dominated the catch (mean length and weight of 39.7 cm and 656 g).

2.1.13. American plaice Div. 3N (280 mm codend mesh size)

Information on length composition of the 280 mm mesh size American plaice by-catch in Div. 3N is available for May, August and September (Table XVII-B, Fig. 12B), from 46 m to 87 m depth.

Lengths between 32 cm and 38 cm dominated the catch, with two modal classes at these lengths (mean length and weight of 38 cm and 589 g).

2.1.14. American plaice Div. 3O

Information on length composition of the American plaice by-catch in Div. 3O is available from March to August, except for June and July (Table XVIII, Fig. 13), from 95 m to 669 m depth.

Lengths between 30 cm and 36 cm dominated the catch, with a very clear modal class at 32 cm (mean length and weight of 35.5 cm and 484 g).

2.1.15. Yellowtail flounder Div. 3N

Information on length composition of the yellowtail flounder catch in Div. 3N is available only for September (Table XIX-A, Fig. 14A), from 116 m to 124 m depth.

Despite the small sampling (1 sample, 148 fish measured), the data shows that the lengths between 32 cm and 38 cm dominated the catch (mean length and weight of 36.2 cm and 453 g).

2.1.16. Yellowtail flounder Div. 3N (280 mm codend mesh size)

Information on length composition of the 280 mm mesh size yellowtail flounder catch in Div. 3N is available for March, August and September (Table XIX-B, Fig. 14B), from 42 m to 54 m depth.

Lengths between 30 cm and 38 cm dominated the catch, with a very clear modal class at 34 cm (mean length and weight of 35 cm and 408 g).

2.1.17. Greenland halibut Div. 3L

Information on length composition of the Greenland halibut catches in Div. 3L is available from February to October (Table XX, Fig. 15), from 813 m to 1390 m depth.

Lengths between 42 cm and 50 cm dominated the catch, with a modal class at 46 cm (mean length and weight of 47.2 cm and 960 g).

2.1.18. Greenland halibut Div. 3M

Information on length composition of the Greenland halibut catches in Div. 3M is available from February to October (Table XXI, Fig. 16), from 735 m to 2200 m depth.

Lengths between 42 cm and 50 cm dominated the catch, with two modal classes at 46 and 48 cm (mean length and weight of 47.8 cm and 998 g).

2.1.19. Greenland halibut Div. 3N

Information on length composition of the Greenland halibut catches in Div. 3N is available for March, April and August (Table XXII, Fig. 17), from 669 m to 1240 m depth.

Despite the small sampling (4 samples, but only 230 fish measured), the data shows that lengths between 44 cm and 50 cm dominated the catch (mean length and weight of 48.4 cm and 1034 g).

2.1.20. Greenland halibut Div. 3O

Information on length composition of the Greenland halibut catches in Div. 3O is available for March and April (Table XXIII, Fig. 18), from 539 m to 1383 m depth.

Despite the small sampling (3 samples, 156 fish measured), the data shows that lengths between 40 cm and 44 cm dominated the catch (mean length and weight of 45.2 cm and 835 g).

2.1.21. Roughhead grenadier Div. 3L

Information on length composition of the roughhead grenadier catches in Div. 3L is available from February to September (Table XXIV, Fig. 19), from 856 m to 1246 m depth.

Anal fin lengths between 11 cm and 13 cm dominated the catch, with a very clear modal class at 12 cm (mean length and weight of 13 cm and 323 g).

2.1.22. Roughhead grenadier Div. 3M

Information on length composition of the roughhead grenadier catches in Div. 3M is available from February to August, except July (Table XXV, Fig. 20), from 805 m to 1228 m depth.

Anal fin lengths between 11 cm and 13 cm dominated the catch, with a clear modal class at 12 cm (mean length and weight of 13.4 cm and 355 g).

2.1.23. Roughhead grenadier Div. 3N

Information on length composition of the roughhead grenadier catches in Div. 3N is available for March and April (Table XXVI, Fig. 21), from 771 m to 1240 m depth.

Despite the small sampling (3 samples, 270 fish measured), the data shows that anal fin lengths between 11 cm and 13 cm dominated the catch (mean length and weight of 13.5 cm and 357 g).

2.1.24. Roughhead grenadier Div. 3O

Information on length composition of the roughhead grenadier catches in Div. 3O is available only for April (Table XXVII, Fig. 22), from 1010 m to 1383 m depth.

Because the very small sampling (1 sample, 68 fish measured), no conclusions can be taken about the dominant lengths in the catch (mean length and weight of 13 cm and 323 g).

2.1.25. Witch flounder Div. 3L

Information on length composition of the witch flounder catches in Div. 3L is available for March and April (Table XXVIII, Fig. 23), from 845 m to 975m depth.

Despite the small sampling (3 samples, 205 fish measured), the data shows that lengths at 32 cm, 36 cm, 40 cm and 44 cm dominated the catch (mean length and weight of 38.6 cm and 409 g).

2.1.26. Witch flounder Div. 3O

Information on length composition of the witch flounder catches in Div. 3O is available from March to May and for August (Table XXIX, Fig. 24), from 96 m to 669 m depth.

Lengths between 34cm and 40cm dominated the catch, with two very clear modal classes at 36 cm and 38cm (mean length and weight of 38 cm and 377 g).

2.1.27. Atlantic halibut Div. 3N

Information on length composition of the Atlantic halibut by-catch in Div. 3N is available for March and April (Table XXX, Fig. 25), from 371 m to 685 m depth.

Because the very small sampling (4 samples, 49 fish measured), there are no comments about class abundance (mean length and weight of 76.7 cm and 7134 g).

2.1.28. Atlantic halibut Div. 3O

Information on length composition of the Atlantic halibut by-catch in Div. 3O is available from March to May (Table XXXI, Fig. 26), from 320 m to 561 m depth.

Despite the small sampling (9 samples, 107 fish measured), the data shows that lengths at 66 cm and 72 cm dominated the catch (mean length and weight of 75.1 cm and 5834 g).

2.1.29. Thorny skate Div. 3L

Information on length composition of the thorny skate catches in Div. 3L is available for April and May (Table XXXII, Fig. 27), from 813 m to 993 m depth.

Despite the small sampling (4 samples, 129 fish measured), the data shows that lengths between 46 cm and 52 cm and at 56 cm dominated the catch (mean length and weight of 51.2 cm and 1432 g).

2.1.30. Thorny skate Div. 3M

Information on length composition of the thorny skate catches in Div. 3M is available from February to September, except June (Table XXXIII, Fig. 28), from 247 m to 1109 m depth.

Lengths at 38 cm, 42 cm and 46 cm dominated the catch (mean length and weight of 45.1 cm and 1110 g).

2.1.31. Thorny skate Div. 3N

Information on length composition of the thorny skate catches in Div. 3N is available only for March (Table XXXIV-A, Fig. 29A), from 324 m to 1183 m depth.

Because sampling data is based on a very small number of observations (2 samples, 38 fish measured), there are no comments about class abundance, but the lengths range was from 34 cm to 56 cm (mean length and weight of 45.1 cm and 1062 g).

2.1.32. Thorny skate Div. 3N (280 mm codend mesh size)

Information on length composition of the 280 mm mesh size thorny skate catches in Div. 3N is available for May, August and September (Table XXXIV-B, Fig. 29B), from 46 m to 87 m depth.

Lengths at 34cm and between 38 cm and 44 cm dominated the catch, with a very clear modal class at 42 cm (mean length and weight of 41.3 cm and 867 g).

2.1.33. Thorny skate Div. 3O

Information on length composition of the thorny skate catches in Div. 3O is available only for March and May (Table XXXV, Fig. 30), from 96 m to 585 m depth.

Despite the small sampling (8 samples, 201 fish measured), the data shows that lengths between 40 cm and 48 cm dominated the catch, with a modal class at 44 cm (mean length and weight of 42.6 cm and 932 g).

2.1.34. Spinytail skate Div. 3L

Information on length composition of the spinytail skate catches in Div. 3L is available from March to July, except June (Table XXXVI, Fig. 31), from 855 m to 1234 m depth.

Because sampling data is based on a small number of observations (20 samples, 228 fish measured) and due the large range of lengths showed (20 cm to 74 cm), there are no comments about class abundance (mean length and weight of 58 cm and 7086 g).

2.1.35. Spinytail skate Div. 3M

Information on length composition of the spinytail skate catches in Div. 3M is available from March to August, except for June and July (Table XXXVII, Fig. 32), from 880 m to 1218 m depth.

Although the sample has a reasonable size (36 samples, 424 fish measured), due the large range of lengths showed (18 cm to 78 cm), there are no comments about class abundance (mean length and weight of 56.4 cm and 6593 g).

2.1.36. Spinytail skate Div. 3N

Information on length composition of the spinytail skate catches in Div. 3N is available for March and April (Table XXXVIII, Fig. 33), from 771 m to 1240 m depth.

Because sampling data is based on a very small number of observations (3 sample, 31 fish measured), there are no comments about class abundance but the lengths range was from 40 cm to 72cm (mean length and weight of 60.5 cm and 7704 g).

2.1.37. White hake Div. 3O

Information on length composition of the white hake catches in Div. 3O is available from March to May and for August (Table XXXIX, Fig. 34), from 320 m to 572 m depth.

Data scattering doesn't allow us to make conclusions about the dominant lengths in the catch (mean length and weight of 46.9 cm and 1145g).

2.1.38. Haddock Div. 3M

Information on length composition of the haddock catches in Div. 3M is available only for March (Table XL, Fig. 35), from 288 m to 289 m depth.

Because sampling data is based on a very small number of observations (1 sample, 71 fish measured) there are no comments about class abundance but the lengths range was from 30 cm to 51 cm (mean length and weight of 42.1 cm and 636 g).

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4. References

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TABLE I-A: PORTUGUESE NOMINAL TRAWL CATCHES (mt) IN NAFO AREA, 2009.

	DIVISION				TOTAL
SPECIES	3L	3M	3N	3O	2009
Cod		857	68	77	1002
Redfish	43	5027	17	4273	9360
American plaice	27	35	131	103	296
Yellowtail flounder			53	19	72
Witch flounder	9	60	6	55	130
Greenland halibut	1222	496	88	269	2075
Atlantic halibut	1	16	2	450	469
Roughhead grenadier	149	26	86	4	265
Roundnose grenadier	7	1	189		197
Anarhichas spp.	1	41		1	43
Hadocck				3	3
Pollock					
White hake	1	1	1	24	27
Red hake					
Capelin					
Skates	16	313	618	101	1048
Monkfish			2	3	5
Squid		2		26	28
Shrimp	320	3			323
Unidentified	2	46	39		87
TOTAL	1798	6924	1300	5408	15429

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

SPECIES / YEAR	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999
Cod	1002	478	256	177	104	280	677	488	357	193	327
Redfish	9360	8480	7317	7802	7337	5969	7710	6344	5324	5743	6081
American plaice	296	355	440	361	372	512	901	631	633	402	719
Yellowtail flounder	72	144	281	194	188	69	287	122	351	153	426
Witch flounder	130	219	122	137	150	588	501	433	579	228	508
Greenland halibut	2075	2008	2018	2327	2256	1881	4611	4319	5026	4769	3995
Atlantic halibut	469	24	35	30	19	60	89	46	44	29	51
Roughhead grenadier (1)	265	78	33	138	263	380	292	508	610	396	1299
Roundnose grenadier	197	31	36								
Anarhichas spp.	43	26	16	30	31	46	106	87	141	61	549
Hadocck	3	1	2	0	6	23	131	78	23	13	10
Pollock						4	115				
White hake (2)	27	55	61	96	156	1265	3919	1969	273	41	77
Red hake		3	2	1	18	12	2				
Capelin											
Skates	1048	1086	1094	1003	575	1543	1816	1361	880	666	2168
Monkfish	5	12	22	25	5	74	156				
Squid	28	5		18		11					
Shrimp	323					50		15	420	289	227
Unidentified	87	3	2	1	3	11	13	43	41	3	117
TOTAL	15429	13007	11737	12341	11483	12776	21324	16443	14701	12985	16554

TABLE I - B: cont.

SPECIES / YEAR	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988
Cod	549	1546	1318	1353	2636	3651	5984	13357	15138	24129	12931
Redfish	2368	1125	2152	2590	8609	9828	6581	12163	17810	18870	17072
American plaice	357	389	298	175	344	347	451	1288	714	1821	1791
Yellowtail flounder	85						1	10	11	5	
Witch flounder	381	347	236	375	573	289	849	1982	2254	16	12
Greenland halibut	3242	3343	3308	1814	5967	8805	10539	13961	11170	3614	4194
Atlantic halibut	30	17	12	18	45	53	81	228	91		
Roughhead grenadier (1)	1089	762	784	1402	2223	1969	2000	4486	3211	290	914
Roundnose grenadier											
Anarhichas spp.	140	185	122	1401	3219	2302	1696	2843	1940		
Hadocck	6	39		2	10	10	166	83	17		
Pollock					13	41	28	421	11		
White hake (2)	18	56	124	230	267	366	466	1009	467		
Red hake											
Capelin									77		
Skates	1105	904	788	2068	6238	7626	7017	23301	13569	663	1097
Monkfish				2		8	37	10	2		
Squid	1		3								
Shrimp	203	170									
Unidentified	40	116	22	14	12	238	325	174	852		
TOTAL	9614	9000	9167	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 2009.

MONTH	DIVISION								TOTAL		MONTH
	3L		3M		3N		3O				
	DAYS	HOURS	DAYS	HOURS	DAYS	HOURS	DAYS	HOURS	DAYS	HOURS	
JAN.	40	504	13	75	9	52	4	24	66	654	JAN.
FEB.	55	716	9	63			3	12	67	790	FEB.
MAR.	27	304	39	498	2	18	4	31	72	850	MAR.
APR.	40	554	61	802	1	4	10	107	112	1466	APR.
MAY	68	891	59	615	6	75	17	200	150	1780	MAY
JUN.	46	655	55	555	9	92	35	302	145	1605	JUN.
JUL.	43	642	103	1127	13	134	15	74	174	1977	JUL.
AUG.	22	311	107	1138	21	263	41	377	191	2088	AUG.
SEP.	16	233	120	1707	4	32	38	353	178	2325	SEP.
OCT.	47	724	81	954	2	14	11	209	141	1900	OCT.
NOV.	46	818	33	298	60	1022	29	357	168	2495	NOV.
DEC.	21	297			21	201	8	78	50	576	DEC.
TOTAL	471	6649	680	7830	148	1905	215	2123	1514	18507	TOTAL

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

YEAR	GEAR				YEAR
	OT		GNS		
	DAYS	HOURS	DAYS	NETS	
2009	1514	18507			2009
2008	1163	14247			2008
2007	1233	14455			2007
2006	1485	19666			2006
2005	1476	15744			2005
2004	1705	18856			2004
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 2009.

DIVISION	TARGET SPECIES	MONTH	DEPTH RANGE (m) MIN.	DEPTH RANGE (m) MAX.	CPUE (ton/hour)	MAIN BYCATCH SPECIES	MAIN BYCATCH %	WITCH FLOUNDER BYCATCH (%)	TOTAL BYCATCH (%)
3M	RED	MAR	275	462	0.763	COD	9.1	0.0	13.3
3M	RED	APR	239	722	0.503	SKA	6.5	0.0	12.1
3M	RED	MAY	242	463	1.515	COD	16.9	0.0	17.8
3M	RED	JUN	268	330	2.012	COD	5.2	0.0	5.2
3M	RED	JUL	228	421	1.725	COD	9.1	0.0	9.2
3M	RED	AUG	217	319	1.749	COD	7.6	0.0	7.8
3M	RED	SEP	28	369	1.117	COD	12.6	0.0	12.9
3O	RED	MAR	300	561	2.279	WIT	4.7	4.7	15.9
3O	RED	APR	363	669	0.577	WIT	23.1	23.1	57.8
3O	RED	MAY	155	585	0.975	SKA	4.9	1.5	20.1
3O	RED	AUG	322	503	5.465	COD	2.0	0.3	5.4
3O	RED	SEP	414	582	3.127	COD	6.2	0.0	8.4
3L	GHL	FEB	930	1140	0.308	RHG	2.3	0.4	2.9
3L	GHL	MAR	845	1140	0.614	RHG	1.2	0.6	3.3
3L	GHL	APR	813	1490	0.903	SKA	2.0	0.6	6.1
3L	GHL	MAY	813	1456	0.725	RHG	2.4	0.1	5.6
3L	GHL	JUN	860	1165	0.466	RHG	5.1	0.0	5.1
3L	GHL	JUL	979	1088	0.667	RHG	8.7	0.0	11.5
3L	GHL	SEP	884	1390	0.791	RHG	8.7	0.0	11.5
3M	GHL	FEB	901	1125	0.527	RHG	1.8	0.3	2.9
3M	GHL	MAR	735	1164	0.607	SKA	2.5	0.1	5.1
3M	GHL	APR	719	1218	0.763	RHG	2.2	0.1	4.3
3M	GHL	MAY	735	1218	0.681	RHG	1.6	0.1	3.9
3M	GHL	JUN	887	1117	0.546	RHG	2.2	0.0	2.2
3M	GHL	JUL	926	1060	0.421	RHG	8.9	0.0	15.7
3M	GHL	AUG	954	994	0.491	RHG	18.2	0.0	22.6
3N	GHL	MAR	1204	1240	0.398	RHG	22.5	2.7	60.7
3N	GHL	APR	1032	1193	0.417	RHG	26.2	0.0	32.5
3O	GHL	APR	604	1383	0.478	RED	23.4	15.8	52.7
3N	RHG	MAR	1204	1240	0.227	GHL	39.3	2.7	77.5
3L	SKA	APR	813	937	0.124	GHL	48.6	3.2	70.2
3N	SKA	MAY	50	57	0.255	PLA	42.6	0.0	57.4
3N	SKA	AUG	46	87	0.494	PLA	35.7	0.0	50.0
3N	SKA	SEP	48	63	0.299	YEL	23.1	0.0	50.8
3O	SKA	AUG	118	137	0.089	SQI	22.2	14.8	76.9

TABLE IV - A: GREENLAND HALIBUT TRAWL CATCH RATES, 1988-2009: mean annual cpue's corrected for the month, division and vessel of each observation.

	3L			3M			3N			3LMN			
	CPUE	ST.ERROR	C.V.	CPUE	ST.ERROR	C.V.	CPUE	ST.ERROR	C.V.	CPUE	ST.ERROR	C.V.	
1988	0.447	0.087	39.1							0.413	0.094	45.4	1988
1989	0.422	0.072	51.2							0.389	0.072	55.9	1989
1990	0.377	0.039	35.5	0.157			0.158			0.324	0.037	43.2	1990
1991	0.217	0.048	49.4				0.120	0.030	43.8	0.174	0.035	57.5	1991
1992	0.155	0.030	61.1				0.256	0.031	42.5	0.230	0.031	64.2	1992
1993	0.100	0.003	4.2				0.171	0.019	37.5	0.204	0.024	43.3	1993
1994	0.079	0.003	5.4				0.112	0.014	30.4	0.130	0.028	60.6	1994
1995	0.140	0.023	47.6	0.179	0.019	23.6	0.135	0.022	42.5	0.150	0.016	46.2	1995
1996	0.196	0.019	34.6	0.193	0.025	38.5	0.164	0.019	30.9	0.177	0.010	30.7	1996
1997	0.202	0.016	26.8	0.252	0.020	22.6	0.115	0.009	10.4	0.190	0.014	34.2	1997
1998	0.268	0.015	20.6	0.239	0.026	37.1	0.209	0.016	25.4	0.248	0.011	28.2	1998
1999	0.287	0.023	25.8	0.338	0.036	31.6	0.259	0.021	23.8	0.294	0.017	30.7	1999
2000	0.274	0.012	11.9	0.277	0.019	15.6	0.294	0.042	28.7	0.278	0.021	30.6	2000
2001	0.203	0.018	23.6	0.209	0.007	8.6	0.198	0.013	15.1	0.204	0.013	27.1	2001
2002	0.229	0.023	33.4	0.221	0.032	47.9	0.262	0.034	25.6	0.225	0.018	41.3	2002
2003	0.219	0.025	36.7	0.212	0.036	47.6	0.206	0.024	28.3	0.218	0.020	44.4	2003
2004	0.109	0.015	42.5	0.090	0.024	79.7	0.134	0.009	19.8	0.130	0.015	62.4	2004
2005	0.316	0.018	8.1	0.306	0.060	27.7				0.288	0.022	15.2	2005
2006	0.442	0.042	23.2	0.256	0.054	36.8				0.347	0.044	38.2	2006
2007	0.645	0.083	31.6	0.390	0.065	33.4				0.516	0.069	42.2	2007
2008	0.433	0.029	16.6	0.415	0.032	15.2				0.403	0.019	14.8	2008
2009	0.704	0.090	38.5	0.623	0.046	20.9				0.642	0.050	32.9	2009

TABLE IV - B: GREENLAND HALIBUT TRAWL CATCH RATES,
1988-2009 mean cpue's by division corrected for the year, month and vessel of each observation.

	CPUE	ST.ERROR	C.V.	
3L	0.293	0.008	37.7	3L
3M	0.267	0.009	33.0	3M
3N	0.194	0.006	31.3	3N
3LMN	0.258	0.005	39.4	3LMN

TABLE V: Intensity of the trawl sampling during 2009, by species, division and month.

SPECIES	DIV.	MONTH	Nº OF SAMPLES	Nº FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS Nº	OTOLITHS LENGTH RANGE (cm)
COD	3M	MAR	5	285	494	-	-
COD	3M	APR	5	193	276	60	41-77
COD	3M	MAY	7	434	1512	75	52-91
COD	3M	JUN	2	189	431	-	-
COD	3M	JUL	41	1953	7143	562	35-101
COD	3M	AUG	73	3567	11052	720	23-112
COD	3M	SEP	50	2815	9499	481	24-115
COD	3N	MAR	3	182	135	65	28-67
COD	3N	APR	3	99	78	-	-
COD	3N	MAY	3	39	242	-	-
COD	3N	AUG	6	277	809	-	-
COD	3N	SEP	2	121	130	-	-
COD	3O	MAR	4	211	148	58	27-69
COD	3O	APR	3	124	119	45	30-101
COD	3O	MAY	6	271	358	107	26-102
COD	3O	AUG	8	449	499	-	-
COD	3O	SEP	2	162	176	-	-
REDFISH (*S. mentella*)	3L	APR	13	896	399	73	26-37
REDFISH (*S. mentella*)	3L	MAY	7	457	182	-	-
REDFISH (*S. mentella*)	3L	JUL	3	167	95	-	-
REDFISH (*S. mentella*)	3L	SEP	2	104	59	-	-
REDFISH (*S. mentella*)	3M	MAR	8	803	273	-	-
REDFISH (*S. mentella*)	3M	APR	18	1466	528	-	-
REDFISH (*S. mentella*)	3M	MAY	12	810	295	38	25-36
REDFISH (*S. mentella*)	3M	JUL	47	4059	1356	1153	15-45
REDFISH (*S. mentella*)	3M	AUG	47	4726	1465	532	12-47
REDFISH (*S. mentella*)	3M	SEP	33	4044	1355	295	18-44
REDFISH (*S. mentella*)	3M	OCT	3	214	112	-	-
REDFISH (*S. mentella*)	3N	MAR	3	499	110	-	-
REDFISH (*S. mentella*)	3N	APR	3	364	65	-	-
REDFISH (*S. mentella*)	3N	AUG	3	728	144	-	-
REDFISH (*S. mentella*)	3O	MAR	4	575	125	54	18-34
REDFISH (*S. mentella*)	3O	APR	3	292	51	-	-
REDFISH (*S. mentella*)	3O	MAY	6	612	123	51	19-32
REDFISH (*S. mentella*)	3O	AUG	8	1969	240	74	14-28
REDFISH (*S. mentella*)	3O	SEP	2	410	50	-	-
REDFISH (*S. marinus*)	3M	MAR	3	300	114	-	-
REDFISH (*S. marinus*)	3M	APR	1	100	33	-	-
REDFISH (*S. marinus*)	3M	MAY	6	480	180	244	22-48
REDFISH (*S. marinus*)	3M	JUN	2	163	53	161	22-38
AMERICAN PLAICE	3L	FEB	1	43	27	-	-
AMERICAN PLAICE	3L	MAR	3	218	139	-	-
AMERICAN PLAICE	3L	APR	2	158	72	-	-
AMERICAN PLAICE	3M	MAR	1	77	50	-	-
AMERICAN PLAICE	3N	MAY	3	313	181	-	-
AMERICAN PLAICE	3N	AUG	7	635	416	-	-
AMERICAN PLAICE	3N	SEP	2	331	220	-	-
AMERICAN PLAICE	3O	MAR	3	326	137	-	-
AMERICAN PLAICE	3O	APR	3	113	43.6	-	-
AMERICAN PLAICE	3O	MAY	6	305	146.1	-	-
AMERICAN PLAICE	3O	AUG	1	81	50.35	-	-

TABLE V: cont.

SPECIES	DIV.	MONTH	Nº OF SAMPLES	Nº FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS Nº	OTOLITHS LENGTH RANGE (cm)
YELLOWTAIL FLOUNDER	3N	MAY	3	203	85.75	-	-
YELLOWTAIL FLOUNDER	3N	AUG	2	184	61.1	-	-
YELLOWTAIL FLOUNDER	3N	SEP	2	293	96.3	-	-
GREENLAND HALIBUT	3L	FEB	6	548	550.5	-	-
GREENLAND HALIBUT	3L	MAR	21	1828	1758.107	109	38-66
GREENLAND HALIBUT	3L	APR	21	2071	1943.972	168	31-87
GREENLAND HALIBUT	3L	MAY	21	1890	1717.731	535	32-76
GREENLAND HALIBUT	3L	JUN	6	508	430.55	408	33-56
GREENLAND HALIBUT	3L	JUL	3	324	328.55	-	-
GREENLAND HALIBUT	3L	AUG	1	114	134.7	-	-
GREENLAND HALIBUT	3L	SEP	10	1384	1455.5	-	-
GREENLAND HALIBUT	3L	OCT	8	1294	1422.109	85	36-86
GREENLAND HALIBUT	3M	FEB	2	165	173.85	-	-
GREENLAND HALIBUT	3M	MAR	24	2312	2320.456	161	32-80
GREENLAND HALIBUT	3M	APR	37	3539	3652.25	212	29-76
GREENLAND HALIBUT	3M	MAY	30	2817	2722.547	565	32-84
GREENLAND HALIBUT	3M	JUN	2	186	144.4	86	36-50
GREENLAND HALIBUT	3M	JUL	2	209	268	-	-
GREENLAND HALIBUT	3M	AUG	3	280	266.05	-	-
GREENLAND HALIBUT	3M	SEP	3	392	378.85	-	-
GREENLAND HALIBUT	3M	OCT	3	423	502.35	-	-
GREENLAND HALIBUT	3N	MAR	2	109	108.153	39	38-52
GREENLAND HALIBUT	3N	APR	1	53	65.05	-	-
GREENLAND HALIBUT	3N	AUG	1	68	74.95	-	-
GREENLAND HALIBUT	3O	MAR	1	54	47.45	-	-
GREENLAND HALIBUT	3O	APR	2	102	89.35	-	-
ROUGHHEAD GRENADIER	3L	FEB	4	337	142.54	-	-
ROUGHHEAD GRENADIER	3L	MAR	12	1034	502.837	56	8-23.5
ROUGHHEAD GRENADIER	3L	APR	12	1313	504.169	55	8-24
ROUGHHEAD GRENADIER	3L	MAY	16	1387	608.794	432	7.5-33
ROUGHHEAD GRENADIER	3L	JUN	6	436	188.24	218	12-22.5
ROUGHHEAD GRENADIER	3L	JUL	1	165	65.15	-	-
ROUGHHEAD GRENADIER	3L	AUG	1	107	44.55	-	-
ROUGHHEAD GRENADIER	3L	SEP	1	112	39.1	-	-
ROUGHHEAD GRENADIER	3M	FEB	2	147	85.79	-	-
ROUGHHEAD GRENADIER	3M	MAR	15	1642	781.374	57	8-24.5
ROUGHHEAD GRENADIER	3M	APR	23	2221	960.319	201	5-31
ROUGHHEAD GRENADIER	3M	MAY	23	1981	812.264	402	6-23.5
ROUGHHEAD GRENADIER	3M	JUN	1	73	24.61	-	-
ROUGHHEAD GRENADIER	3M	AUG	1	120	52	-	-
ROUGHHEAD GRENADIER	3N	MAR	2	167	71.5	-	-
ROUGHHEAD GRENADIER	3N	APR	1	103	41.7	-	-
ROUGHHEAD GRENADIER	3O	APR	1	68	28.9	-	-
WITCH FLOUNDER	3L	MAR	2	138	60.14	-	-
WITCH FLOUNDER	3L	APR	1	67	27.04	-	-
WITCH FLOUNDER	3O	MAR	3	318	133.65	-	-
WITCH FLOUNDER	3O	APR	3	173	70.36	58	31-49
WITCH FLOUNDER	3O	MAY	6	427	163.55	-	-
WITCH FLOUNDER	3O	AUG	1	85	39	-	-

TABLE V: cont.

SPECIES	DIV.	MONTH	Nº OF SAMPLES	Nº FISH MEASURED	SAMPLING WEIGHT(Kg)	OTOLITHS Nº	OTOLITHS LENGTH RANGE (cm)
ATLANTIC HALIBUT	3N	MAR	1	15	121.1	-	-
ATLANTIC HALIBUT	3N	APR	3	34	214.15	-	-
ATLANTIC HALIBUT	3O	MAR	2	35	201.772	16	61-92
ATLANTIC HALIBUT	3O	APR	1	11	50.65	-	-
ATLANTIC HALIBUT	3O	MAY	6	61	354.15	-	-
WHITE HAKE	3O	MAR	3	112	140.129	24	32-67
WHITE HAKE	3O	APR	3	95	89.35	-	-
WHITE HAKE	3O	MAY	6	183	223.2	-	-
WHITE HAKE	3O	AUG	1	52	72.75	-	-
THORNY SKATE	3L	APR	3	54	325.9	-	-
THORNY SKATE	3L	MAY	1	75	115.7	-	-
THORNY SKATE	3M	FEB	1	35	89.27	-	-
THORNY SKATE	3M	MAR	7	176	635.507	-	-
THORNY SKATE	3M	APR	13	290	1276.358	-	-
THORNY SKATE	3M	MAY	4	47	204.85	-	-
THORNY SKATE	3M	JUL	1	32	155.05	-	-
THORNY SKATE	3M	AUG	2	91	245.9	-	-
THORNY SKATE	3M	SEP	2	78	192.4	-	-
THORNY SKATE	3N	MAR	2	38	177.333	-	-
THORNY SKATE	3N	MAY	3	130	585.5	-	-
THORNY SKATE	3N	AUG	3	135	569.4	-	-
THORNY SKATE	3N	SEP	1	64	287.95	-	-
THORNY SKATE	3O	MAR	2	33	134.428	-	-
THORNY SKATE	3O	MAY	6	168	772.3	-	-
SPINYTAIL SKATE	3L	MAR	4	49	352.757	-	-
SPINYTAIL SKATE	3L	APR	9	103	729.385	-	-
SPINYTAIL SKATE	3L	MAY	6	67	505.4	-	-
SPINYTAIL SKATE	3L	JUL	1	9	85.15	-	-
SPINYTAIL SKATE	3M	MAR	9	118	784.344	-	-
SPINYTAIL SKATE	3M	APR	17	201	1374.658	-	-
SPINYTAIL SKATE	3M	MAY	8	80	514	-	-
SPINYTAIL SKATE	3M	AUG	1	12	90.25	-	-
SPINYTAIL SKATE	3M	SEP	1	13	94.15	-	-
SPINYTAIL SKATE	3N	MAR	2	21	205.389	-	-
SPINYTAIL SKATE	3N	APR	1	10	70.85	-	-
HADDOCK	3M	MAR	1	71	46.2	-	-

TABLE VI: Length-weight relationship by species, stock and sex in 2009.

Species	Stock	Sex	a	b	n	r^2	Length interval (cm)
COD	3M	T	0.0051	3.1594	6880	0.994	23-115
COD	3NO	T	0.0056	3.1528	275	0.994	26-102
GHL	2J3KLMNO	F	0.0017	3.4245	6245	0.985	29-87
GHL	2J3KLMNO	M	0.0049	3.1405	5048	0.992	29-74
GHL	2J3KLMNO	T	0.0018	3.4109	11293	0.989	29-87
WIT	2J3KL	F	0.1102	2.2461	114	0.926	28-48
WIT	2J3KL	M	0.0864	2.3063	91	0.889	27-49
WIT	2J3KL	T	0.0970	2.2783	205	0.952	27-49
WIT	3NO	F	0.0017	3.3697	38	0.989	31-49
WIT	3NO	M	0.0009	3.5537	20	0.981	32-45
WIT	3NO	T	0.0014	3.4134	58	0.993	31-49
PLA	3LNO	F	0.0343	2.6626	242	0.966	26-55
PLA	3LNO	M	0.0460	2.5840	175	0.974	26-56
PLA	3LNO	T	0.0331	2.6745	417	0.973	26-56
PLA	3M	F	0.0786	2.4111	45	0.924	33-50
PLA	3M	M	0.1167	2.3138	32	0.856	32-50
PLA	3M	T	0.0821	2.3989	77	0.948	32-50
RHG	3LMNO	F	0.3916	2.5977	2666	0.946	6.5-33
RHG	3LMNO	M	1.4171	2.0794	2073	0.985	5-28
RHG	3LMNO	T	0.5345	2.4891	4739	0.951	5-33
REB	3LN	F	0.0026	3.4996	35	0.980	27-37
REB	3LN	M	0.0022	3.5597	38	0.976	26-36
REB	3LN	T	0.0037	3.4039	73	0.988	26-37
REB	3M	F	0.0139	3.0222	2823	0.998	12-47
REB	3M	M	0.0081	3.1778	2430	0.998	13-40
REB	3M	T	0.0120	3.0635	5253	0.999	12-47
REB	3O	F	0.0074	3.2156	84	0.992	14-34
REB	3O	M	0.0084	3.1636	94	0.990	14-32
REB	3O	T	0.0075	3.2059	178	0.995	14-34
REG	3M	F	0.0282	2.8072	225	0.992	22-43
REG	3M	M	0.0284	2.8076	219	0.985	23-48
REG	3M	T	0.0265	2.8278	444	0.996	22-48
HAL	3LMNO	T	0.0000	4.3447	30	0.921	60-104
HKW	3LMNO	T	0.0027	3.3456	24	0.965	32-67
HAD	3LMNO	F	0.0609	2.4623	42	0.978	30-51
HAD	3LMNO	M	0.0881	2.3693	29	0.976	30-51
HAD	3LMNO	T	0.0657	2.4446	71	0.979	30-51
RJR	3LMNO	T	0.1229	2.3745	337	0.958	36-103
RJQ	3LMNO	F	0.0938	2.7471	109	0.984	19-75
RJQ	3LMNO	M	0.1325	2.6664	118	0.976	26-78
RJQ	3LMNO	T	0.1191	2.6923	227	0.984	19-78

TABLE VII-A: COD, DIV. 3M, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR	APR	MAY	JUN	JUL	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
21						0.3				0.1	0.1	21
24		1.6					0.2		0.9	0.1	0.3	24
27		4.3							2.5		0.8	27
30	1.6	15.2				2.1	0.1	1.6	8.9	0.9	3.5	30
33	22.8	22.0		21.7	0.2	11.0	7.5	22.8	13.1	7.1	10.2	33
36	13.4	30.2	2.8		3.6	16.1	28.1	13.4	18.8	16.6	17.0	36
39	9.7	22.0	4.2	18.0	19.2	18.5	32.2	9.7	14.8	23.0	19.4	39
42	76.5	8.5	5.1	28.7	21.9	26.1	39.7	76.5	7.3	29.3	26.3	42
45	72.5	22.6	15.3	61.1	33.8	34.2	58.4	72.5	20.0	41.7	37.5	45
48	140.7	26.3	9.9	97.0	65.4	59.7	56.9	140.7	20.3	60.3	54.5	48
51	345.0	67.0	32.3	17.9	53.8	38.8	54.4	345.0	52.5	47.5	73.0	51
54	97.6	149.5	98.4	79.2	60.8	56.4	63.2	97.6	128.2	59.6	83.8	54
57	108.9	148.8	101.9	100.5	95.1	103.9	97.9	108.9	129.4	99.7	109.6	57
60	45.6	103.6	98.6	115.0	123.9	177.2	128.3	45.6	101.7	148.3	125.7	60
63	25.7	160.3	142.4	79.1	122.4	120.9	71.2	25.7	152.3	105.7	113.6	63
66	15.7	101.8	94.8	115.4	83.4	65.8	64.1	15.7	99.1	69.8	74.4	66
69	4.7	87.3	113.1	43.2	57.5	60.8	45.5	4.7	97.3	55.1	64.1	69
72	1.2	14.5	82.2	7.2	57.3	42.7	46.9	1.2	41.9	47.8	42.2	72
75	8.3	14.5	62.0	104.4	56.7	42.1	45.3	8.3	34.5	46.8	40.0	75
78	5.4		16.0	39.7	38.5	41.2	45.3	5.4	6.8	41.8	28.1	78
81			46.3	7.2	33.0	30.7	35.8		18.8	32.9	25.9	81
84	0.9		24.0	25.1	28.9	16.0	23.0	0.9	9.9	21.5	16.3	84
87	3.6		27.6	28.8	10.8	8.8	16.5	3.6	11.4	11.7	11.0	87
90			13.1	3.6	16.1	11.4	10.2		5.3	12.2	9.1	90
93				7.2	5.5	4.2	8.9		0.1	6.0	3.7	93
96			4.3		2.6	4.0	8.4		1.7	5.0	3.6	96
99			2.7		3.9	3.7	4.3		1.1	3.9	2.7	99
102			0.9		2.2	1.8	2.6		0.4	2.2	1.4	102
105			0.9		3.1	1.1	2.2		0.4	1.9	1.3	105
108			0.8			0.2	2.2		0.3	0.8	0.6	108
111					0.5	0.2	0.5			0.3	0.2	111
114			0.5				0.4		0.2	0.1	0.1	114
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	5	5	7	2	41	73	50	5	14	164	183	
SAMPLING WEIGHT(kg)	494	276	1512	431	7143	11052	9499	494	2218	27694	30406	
No. F.MEASURED	285	193	434	189	1953	3567	2815	285	816	8335	9436	
MEAN LENGTH(cm)	52.7	58.6	67.0	62.6	64.6	63.0	62.7	52.7	62.0	63.3	62.1	
MEAN WEIGHT (g)	1504	2139	3270	2757	3028	2807	2896	1504	2602	2892	2691	
DEPTH RANGE (m)	291/460	271/492	275/412	286/330	228/421	220/319	28/369	291/460	271/492	28/421	28/492	

TABLE VII-B: COD, DIV. 3M, 2009: Age Length Key.

LENGTH	AGES							
GROUP	2	3	4	5	6	7	8	TOTAL
36	1							1
39	9							9
42	1	8						9
45		10						10
48		8	1					9
51		1	8					9
54			9					9
57			9					9
60			7	2				9
63			8	1				9
66			3	6				9
69				8		1		9
72				7		1		8
75				8				8
78				3		6		9
81				4		6		10
84				3		6		9
87				1		6	2	9
90						3	6	9
93						6	3	9
96						6	3	9
99						4	11	15
102							6	6
105							2	2
108							3	3
111							2	2
114							2	2
TOTAL	11	27	45	43	0	45	40	211

TABLE VIII-A: COD, DIV. 3N, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR =1st Q.	APR =2nd Q.	SEP =3rd Q.	YEAR	LENGTH GROUP
24	17.0			6.8	24
27	124.9	27.4		56.8	27
30	240.6	73.8		114.8	30
33	116.2	152.5		85.7	33
36	42.8	189.5	12.8	70.5	36
39	40.9	171.8	115.4	100.4	39
42	82.6	83.0	307.7	160.0	42
45	62.4	145.7	346.2	181.4	45
48	98.6	84.6	128.2	105.1	48
51	73.1	40.8	38.5	52.9	51
54	53.1	2.9	38.5	35.1	54
57	25.8	21.9	12.8	20.3	57
60	14.6	2.9		6.6	60
63		2.9		0.8	63
66	7.3			2.9	66
TOTAL	1000	1000	1000	1000	
No. SAMPLES	3	3	1	7	
SAMPLING WEIGHT(kg)	135	78	79	292	
No. F.MEASURED	182	99	78	359	
MEAN LENGTH(cm)	39.9	41.0	45.9	42.2	
MEAN WEIGHT (g)	769	749	1001	843	
DEPTH RANGE (m)	324/1183	371/685	116/124	116/1183	

TABLE VIII-B: COD, DIV. 3N, 2009: length composition (0/000) of the 280mm trawl catches.

LENGTH GROUP	MAY	AUG	SEP	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
27		1.8			1.6	1.6	27
30		3.6			3.2	3.2	30
33		15.0	23.3		15.8	15.5	33
36		50.0			45.1	44.1	36
39		47.4	139.5		56.5	55.3	39
42		72.5	139.5		79.1	77.4	42
45	33.8	68.7	325.6	33.8	94.1	92.8	45
48	135.0	37.7	139.5	135.0	47.8	49.8	48
51		109.9	93.0		108.2	105.8	51
54	33.8	49.7	46.5	33.8	49.4	49.0	54
57	56.9	26.5	69.8	56.9	30.8	31.4	57
60	103.4	114.5		103.4	103.1	103.1	60
63	59.2	110.0	23.3	59.2	101.4	100.5	63
66	46.5	63.1		46.5	56.8	56.6	66
69	103.4	18.8		103.4	16.9	18.8	69
72	90.6	41.4		90.6	37.3	38.5	72
75	71.7	50.6		71.7	45.5	46.1	75
78	12.7	38.9		12.7	35.1	34.6	78
81	23.1	30.7		23.1	27.7	27.6	81
84	69.6	11.4		69.6	10.2	11.6	84
87	46.3	27.9		46.3	25.1	25.6	87
90	33.8	8.2		33.8	7.3	7.9	90
93	46.5	1.8		46.5	1.6	2.6	93
96	33.8			33.8		0.8	96
TOTAL	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	6	1	3	7	10	
SAMPLING WEIGHT(kg)	242	809	51	242	860	1102	
No. F.MEASURED	39	277	43	39	320	359	
MEAN LENGTH(cm)	69.9	59.4	47.6	69.9	58.2	58.5	
MEAN WEIGHT (g)	4236	2639	1156	4236	2491	2530	
DEPTH RANGE (m)	42/54	46/72	48/50	42/54	46/72	42/72	

TABLE IX: COD, DIV. 3O, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR	APR	MAY	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
24	4.0		3.1			4.0	1.9		1.8	24
27	162.0	15.8	3.8			162.0	8.5		55.0	27
30	187.6	89.2	31.9	7.9		187.6	54.0	5.3	77.9	30
33	121.3	293.5	57.2	16.9		121.3	148.5	11.4	84.8	33
36	107.4	173.3	52.3	67.0	28.3	107.4	99.1	54.5	83.9	36
39	83.5	120.8	68.0	171.2	265.8	83.5	88.4	201.8	132.2	39
42	122.9	69.3	197.9	265.9	277.1	122.9	148.2	269.6	188.6	42
45	68.0	95.8	140.8	162.4	241.5	68.0	123.4	188.0	131.2	45
48	55.4	34.7	95.8	163.9	89.0	55.4	72.2	139.7	93.7	48
51	44.0	19.7	74.3	55.7	28.4	44.0	53.2	46.8	47.7	51
54	28.0	54.4	105.0	44.9	13.2	28.0	85.5	34.7	46.5	54
57	12.0	19.2	80.6	25.5	52.9	12.0	56.8	34.4	33.3	57
60			53.1	9.9	1.9		32.6	7.3	11.9	60
63			18.4	3.7			11.3	2.5	4.1	63
66		4.8	3.1	1.4			3.8	1.0	1.4	66
69	4.0				1.9	4.0		0.6	1.5	69
72			3.1				1.9		0.5	72
75		4.8		1.2			1.9	0.8	0.8	75
78				1.2				0.8	0.3	78
81			7.3	1.2			4.5	0.8	1.6	81
84										84
87										87
90										90
93										93
96										96
99		4.8					1.9		0.5	99
102			4.2				2.6		0.7	102
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	4	3	6	8	2	4	9	10	23	
SAMPLING WEIGHT(kg)	148	119	358	499	176	148	477	675	1300	
No. F.MEASURED	211	124	271	449	162	211	395	611	1217	
MEAN LENGTH(cm)	38.3	40.3	48.2	45.7	45.1	38.3	45.1	45.5	43.0	
MEAN WEIGHT (g)	646	775	1303	1021	964	646	1099	1003	913	
DEPTH RANGE (m)	348/560	345/591	95/522	118/452	414/556	348/560	95/591	118/556	95/591	

TABLE X: REDFISH (*S. mentella*), DIV. 3L, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	APR	MAY	JUL	SEP	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
20		4.0			1.6		1.5	20
21	4.4				2.6		2.5	21
22	3.4		4.8		2.0	3.4	2.1	22
23	7.9	4.0			6.3		5.9	23
24	18.2	10.5	13.0		15.1	9.4	14.8	24
25	42.2	52.9	4.8		46.4	3.4	43.8	25
26	46.5	92.9	12.4	20.1	64.9	14.5	61.8	26
27	71.0	69.1	3.5		70.3	2.5	66.1	27
28	68.8	100.4	23.2	20.1	81.4	22.3	77.7	28
29	67.4	99.5	55.7	28.8	80.2	48.3	78.2	29
30	89.0	99.4	83.6	60.3	93.1	77.2	92.1	30
31	100.7	140.7	81.2	129.3	116.6	94.4	115.3	31
32	135.3	138.5	113.3	138.8	136.6	120.3	135.6	32
33	146.9	79.2	168.1	196.5	120.0	175.9	123.5	33
34	94.0	41.5	137.9	81.2	73.1	122.3	76.2	34
35	49.3	25.1	89.5	111.8	39.7	95.6	43.1	35
36	23.9	19.2	60.2	92.6	22.0	69.2	24.9	36
37	16.9	7.8	43.7	26.2	13.3	38.9	14.9	37
38	1.8	2.4	42.0	42.8	2.1	42.3	4.6	38
39	9.1	5.4	14.1	31.5	7.6	18.9	8.3	39
40	0.2		17.2	20.1	0.1	18.0	1.2	40
41	3.3	1.7	12.4		2.6	9.0	3.0	41
42		4.0	12.4		1.6	9.0	2.0	42
43			3.5			2.5	0.2	43
44		1.7	3.5		0.7	2.5	0.8	44
TOTAL	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	13	7	3	2	20	5	25	
SAMPLING WEIGHT(kg)	399	182	95	59	581	153	734	
No. F.MEASURED	896	457	167	104	1353	271	1624	
MEAN LENGTH(cm)	31.3	30.5	33.7	33.8	31.0	33.7	31.1	
MEAN WEIGHT (g)	473	432	613	610	457	612	466	
DEPTH RANGE (m)	856/1168	852/1293	855/995	937/991	852/1293	855/995	852/1293	

TABLE XI: REDFISH (*S. mentella*), DIV. 3M, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR	APR	MAY	JUL	AUG	SEP	OCT	1st Q.	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
12					0.3					0.1		0.1	12
13					1.1					0.5		0.5	13
14					1.0					0.5		0.5	14
15			6.0	5.7	3.6	0.8			3.3	3.3		3.2	15
16	4.2	5.4	13.2	8.3	6.9	2.0		4.2	9.8	5.8		5.8	16
17	9.8	8.7	35.9	9.3	12.4	1.6		9.8	24.0	8.4		8.8	17
18	12.5	6.2	30.8	17.4	11.1	2.8		12.5	20.0	10.2		10.5	18
19	15.5	21.3	45.0	17.8	13.0	6.1		15.5	34.6	12.1		12.8	19
20	30.3	23.6	45.0	27.5	20.1	10.3		30.3	35.6	18.9		19.6	20
21	53.3	59.5	54.4	32.8	27.5	16.2		53.3	56.7	25.4		26.6	21
22	75.8	137.4	113.8	50.5	44.9	36.0		75.8	124.1	43.5		46.3	22
23	83.3	159.3	77.7	73.8	65.5	86.4		83.3	113.5	73.9		75.2	23
24	109.3	105.0	49.0	70.4	86.6	94.0		109.3	73.6	84.9		84.9	24
25	71.7	77.4	55.5	94.9	115.0	116.7	5.9	71.7	65.1	110.6	5.9	108.8	25
26	77.9	82.9	82.3	84.0	114.3	127.0	3.0	77.9	82.6	110.8	3.0	109.5	26
27	79.6	37.9	75.2	85.2	104.1	107.7	26.4	79.6	58.9	100.6	26.4	99.1	27
28	99.5	48.2	88.2	81.4	94.9	104.7	41.0	99.5	70.7	94.6	41.0	94.0	28
29	70.0	37.7	62.6	72.9	82.1	71.8	64.6	70.0	51.7	76.7	64.6	75.9	29
30	52.5	35.0	47.6	58.1	48.6	49.8	137.7	52.5	42.1	51.3	137.7	51.1	30
31	39.2	39.3	48.0	54.6	51.3	50.8	82.4	39.2	44.2	51.9	82.4	51.5	31
32	27.4	35.5	14.8	47.3	33.6	37.3	167.1	27.4	23.9	38.1	167.1	37.5	32
33	36.9	39.4	27.6	35.2	22.3	22.7	158.8	36.9	32.8	25.6	158.8	25.9	33
34	10.1	20.7	9.1	29.2	14.3	17.6	73.0	10.1	14.2	19.0	73.0	18.7	34
35	9.0	10.9	4.3	17.1	11.4	14.5	91.0	9.0	7.2	13.8	91.0	13.5	35
36	14.7	2.0	4.3	10.6	5.9	8.0	52.6	14.7	3.3	7.7	52.6	7.7	36
37	8.0	4.1	3.8	7.0	4.0	6.6	32.3	8.0	3.9	5.5	32.3	5.5	37
38	4.8	0.8	5.0	5.2	2.8	4.3	20.4	4.8	3.2	3.8	20.4	3.8	38
39		0.5	0.5	2.2	0.5	1.8	20.6		0.5	1.3	20.6	1.3	39
40	0.04	0.6		0.002	0.3	1.1	14.6	0.04	0.3	0.5	14.6	0.4	40
41	1.6	0.6		0.3	0.1	0.8	3.0	1.6	0.2	0.3	3.0	0.4	41
42	1.6				0.2	0.3	5.8	1.6		0.2	5.8	0.2	42
43		0.1			0.2				0.04	0.1		0.1	43
44				0.4	0.1	0.3				0.2		0.2	44
45				0.6						0.2		0.1	45
46													46
47	1.6				0.2			1.6		0.1		0.1	47
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	8	18	12	47	47	33	3	8	30	127	3	168	
SAMPLING WEIGHT(kg)	273	528	295	1356	1465	1355	112	273	824	4176	112	5385	
No. F.MEASURED	803	1466	810	4059	4726	4044	214	803	2276	12829	214	16122	
MEAN LENGTH(cm)	26.7	25.9	25.4	27.2	26.9	27.4	33.0	26.7	25.6	27.1	33.0	27.1	
MEAN WEIGHT (g)	307	277	269	326	308	325	559	307	272	318	559	316	
DEPTH RANGE (m)	291/850	271/1170	292/1123	228/1060	220/313	28/1108	884/1073	291/850	271/1170	28/1108	884/1073	28/1170	

TABLE XII: REDFISH (*S. mentella*), DIV. 3N, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR =1st Q.	APR =2nd Q.	AUG =3rd Q.	YEAR	LENGTH GROUP
11			1.6	0.8	11
12			4.8	2.4	12
13			11.1	5.5	13
14			15.8	7.8	14
15	8.9	3.9	17.6	12.2	15
16	20.5	15.0	27.6	22.9	16
17	30.9	23.0	31.2	29.4	17
18	35.8	54.1	94.7	68.7	18
19	40.3	46.8	94.5	68.5	19
20	57.5	86.6	93.3	81.2	20
21	73.7	131.9	106.0	101.6	21
22	63.9	169.9	118.7	112.7	22
23	71.6	165.9	131.1	120.3	23
24	53.3	108.6	64.2	70.0	24
25	69.9	60.6	58.5	62.4	25
26	74.5	64.1	47.7	59.1	26
27	97.7	16.4	22.8	44.0	27
28	116.2	14.5	12.0	43.8	28
29	69.4	17.3	13.4	31.0	29
30	40.8	13.6	10.5	20.2	30
31	23.4	3.9	8.0	11.8	31
32	18.1		4.6	7.7	32
33	10.4	2.0	4.9	6.0	33
34	13.5		4.8	6.5	34
35	2.2	2.0	0.2	1.2	35
36	7.5		0.1	2.3	36
37			0.1	0.03	37
38			0.04	0.02	38
39			0.1	0.03	39
40			0.1	0.03	40
41			0.02	0.01	41
42			0.02	0.01	42
TOTAL	1000	1000	1000	1000	
No. SAMPLES	3	3	3	9	
SAMPLING WEIGHT(kg)	110	65	144	318	
No. F.MEASURED	499	364	728	1591	
MEAN LENGTH(cm)	25.2	22.9	22.0	23.2	
MEAN WEIGHT (g)	238	161	149	178	
DEPTH RANGE (m)	324/1183	371/685	322/688	322/1183	

TABLE XIII: REDFISH (*S. mentella*), DIV. 3O, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR	APR	MAY	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
13				2.0	4.5			2.3	1.7	13
14				12.6	21.2			13.6	10.1	14
15		5.4	2.8	33.7	24.3		3.3	32.5	24.6	15
16	11.9	14.6	14.1	72.3	63.2	11.9	14.2	71.2	56.2	16
17	22.7	25.6	16.3	132.0	79.5	22.7	18.3	125.6	98.4	17
18	66.6	55.0	44.6	179.0	146.5	66.6	46.9	175.0	144.2	18
19	52.0	65.4	37.0	122.4	139.7	52.0	43.3	124.6	104.6	19
20	63.5	64.6	49.1	84.4	130.7	63.5	52.5	90.1	81.8	20
21	57.1	191.7	76.1	76.0	128.9	57.1	101.4	82.5	82.0	21
22	115.4	165.5	134.1	86.1	100.5	115.4	141.0	87.9	98.5	22
23	113.5	129.8	147.9	71.3	54.1	113.5	143.9	69.2	84.8	23
24	102.3	133.6	113.9	46.6	38.3	102.3	118.2	45.6	62.5	24
25	84.6	48.7	118.7	30.4	21.7	84.6	103.4	29.3	46.2	25
26	76.1	29.0	63.6	15.5	13.5	76.1	56.1	15.2	28.2	26
27	41.2	29.1	61.2	17.5	10.4	41.2	54.1	16.6	24.7	27
28	46.2	10.9	29.5	6.2	14.0	46.2	25.4	7.2	14.4	28
29	40.2	10.9	19.3	5.2	5.8	40.2	17.4	5.3	11.2	29
30	46.7	12.8	9.9	4.5	3.2	46.7	10.5	4.4	10.4	30
31	16.9	5.5	35.1	1.4		16.9	28.6	1.2	6.9	31
32	18.1		19.9	0.8		18.1	15.6	0.7	4.9	32
33	8.3	1.7	5.7			8.3	4.8		1.7	33
34	10.4		1.2			10.4	0.9		1.4	34
35	1.2					1.2			0.1	35
36										36
37	1.6					1.6			0.2	37
38	1.7					1.7			0.2	38
39										39
40	1.7					1.7			0.2	40
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	4	3	6	8	2	4	9	10	23	
SAMPLING WEIGHT(kg)	125	51	123	240	50	125	174	290	589	
No. F.MEASURED	575	292	612	1969	410	575	904	2379	3858	
MEAN LENGTH(cm)	24.4	22.6	24.1	20.3	20.4	24.4	23.8	20.3	21.3	
MEAN WEIGHT (g)	229	174	217	126	127	229	208	126	150	
DEPTH RANGE (m)	300/560	345/572	374/585	278/452	414/556	300/560	345/585	278/556	278/585	

TABLE XIV: REDFISH (*S. marinus*), DIV. 3M, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR	APR	MAY	JUN	1st Q.	2nd Q.	YEAR	LENGTH GROUP
18	3.3				3.3		0.8	18
19								19
20								20
21	6.7				6.7		1.7	21
22	13.3		4.9	6.1	13.3	4.2	6.5	22
23	20.0	30.0	14.1	30.7	20.0	19.7	19.8	23
24	33.3	50.0	35.2	147.2	33.3	55.3	49.8	24
25	50.0	90.0	95.8	128.8	50.0	99.8	87.4	25
26	46.7	70.0	108.8	79.8	46.7	97.0	84.4	26
27	113.3	160.0	117.7	92.0	113.3	121.8	119.7	27
28	106.7	120.0	142.3	110.4	106.7	133.1	126.5	28
29	110.0	110.0	150.7	98.2	110.0	134.8	128.6	29
30	103.3	110.0	96.4	92.0	103.3	98.3	99.6	30
31	116.7	140.0	73.3	67.5	116.7	85.0	92.9	31
32	66.7	10.0	47.0	61.3	66.7	42.2	48.3	32
33	70.0	60.0	50.2	30.7	70.0	49.1	54.3	33
34	40.0	20.0	23.1	18.4	40.0	21.8	26.3	34
35	36.7	10.0	6.1	12.3	36.7	7.8	15.0	35
36	26.7		10.1	12.3	26.7	8.5	13.1	36
37	20.0		8.1	6.1	20.0	6.2	9.7	37
38	10.0		4.0	6.1	10.0	3.6	5.2	38
39								39
40			4.0			2.7	2.0	40
41	3.3	10.0	4.0		3.3	4.5	4.2	41
42								42
43	3.3	10.0	2.0		3.3	3.2	3.2	43
44								44
45								45
46								46
47								47
48			2.0			1.3	1.0	48
TOTAL	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	1	6	2	3	9	12	
SAMPLING WEIGHT(kg)	114	33	180	53	114	267	381	
No. F.MEASURED	300	100	480	163	300	743	1043	
MEAN LENGTH(cm)	30.1	29.1	29.2	28.4	30.1	29.1	29.3	
MEAN WEIGHT (g)	416	378	379	351	416	374	385	
DEPTH RANGE (m)	275/290	285/291	275/320	286/330	275/290	275/330	275/330	

TABLE XV: AMERICAN PLAICE, DIV. 3L, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	FEB	MAR	APR	1st Q.	2nd Q.	YEAR	LENGTH GROUP
26		12.8	38.3	12.4	38.3	26.7	26
28		29.0	71.1	28.1	71.1	51.8	28
30		13.9	170.1	13.4	170.1	100.0	30
32	46.5	115.5	180.5	113.3	180.5	150.4	32
34	139.5	27.4	107.8	31.0	107.8	73.5	34
36	139.5	139.1	156.5	139.1	156.5	148.7	36
38	186.0	162.9	85.5	163.7	85.5	120.4	38
40	116.3	193.8	127.0	191.3	127.0	155.8	40
42	162.8	127.1	57.5	128.3	57.5	89.2	42
44		37.5		36.3		16.2	44
46	46.5	51.8		51.6		23.1	46
48	46.5	36.8	5.6	37.1	5.6	19.7	48
50	116.3	25.5		28.4		12.7	50
52		9.0		8.7		3.9	52
54		13.5		13.1		5.8	54
56		4.5		4.4		1.9	56
TOTAL	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	3	2	4	2	6	
SAMPLING WEIGHT(kg)	27	139	72	166	72	238	
No. F.MEASURED	43	218	158	261	158	419	
MEAN LENGTH(cm)	41.0	40.0	35.2	40.0	35.2	37.3	
MEAN WEIGHT (g)	700	659	466	660	466	553	
DEPTH RANGE (m)	930/982	845/948	840/925	845/982	840/925	840/982	

TABLE XVI: AMERICAN PLAICE, DIV. 3M, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR = YEAR	LENGTH GROUP
32	39.0	32
34	26.0	34
36	168.8	36
38	155.8	38
40	246.8	40
42	129.9	42
44	39.0	44
46	51.9	46
48	51.9	48
50	90.9	50
TOTAL	1000	
No. SAMPLES	1	
SAMPLING WEIGHT(kg)	50	
No. F.MEASURED	77	
MEAN LENGTH(cm)	41.6	
MEAN WEIGHT (g)	652	
DEPTH RANGE (m)	879/1003	

TABLE XVII -A: AMERICAN PLAICE, DIV. 3N, 2009: length composition (0/000) of the 130mm trawl catches

LENGTH GROUP	SEP = YEAR	LENGTH GROUP
26	4.9	26
28	34.3	28
30	68.6	30
32	98.0	32
34	122.5	34
36	147.1	36
38	127.5	38
40	39.2	40
42	68.6	42
44	58.8	44
46	98.0	46
48	88.2	48
50	19.6	50
52	4.9	52
54	19.6	54
TOTAL	1000	
No. SAMPLES	1	
SAMPLING WEIGHT(kg)	127	
No. F.MEASURED	204	
MEAN LENGTH(cm)	39.7	
MEAN WEIGHT (g)	656	
DEPTH RANGE (m)	116/124	

TABLE XVII-B: AMERICAN PLAICE, DIV. 3N, 2009: length composition (0/000) of the 280mm trawl catches.

LENGTH GROUP	MAY	AUG	SEP	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
22		4.3			4.1	3.3	22
24	4.0	9.7		4.0	9.3	8.2	24
26	12.0	15.1	7.9	12.0	14.8	14.3	26
28	24.3	30.4	31.5	24.3	30.5	29.2	28
30	89.7	92.5	15.7	89.7	89.4	89.5	30
32	155.0	159.5	63.0	155.0	155.6	155.5	32
34	200.9	134.8	70.9	200.9	132.3	146.1	34
36	136.3	126.2	118.1	136.3	125.9	128.0	36
38	102.0	162.8	149.6	102.0	162.3	150.1	38
40	32.1	80.1	149.6	32.1	82.9	72.6	40
42	41.4	34.0	78.7	41.4	35.8	36.9	42
44	61.0	38.6	15.7	61.0	37.7	42.4	44
46	49.3	9.2	55.1	49.3	11.0	18.7	46
48	40.0	20.1	165.4	40.0	25.9	28.7	48
50	18.0	24.9	47.2	18.0	25.8	24.2	50
52	12.9	26.0	7.9	12.9	25.3	22.8	52
54	17.1	19.5	7.9	17.1	19.1	18.7	54
56	4.0	11.3	15.7	4.0	11.4	9.9	56
58		0.2			0.2	0.1	58
60		0.7			0.7	0.5	60
62		0.1			0.1	0.04	62
TOTAL	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	7	1	3	8	11	
SAMPLING WEIGHT(kg)	181	416	93	181	509	690	
No. F.MEASURED	313	635	127	313	762	1075	
MEAN LENGTH(cm)	38.0	37.8	41.5	38.0	38.0	38.0	
MEAN WEIGHT (g)	586	584	733	586	590	589	
DEPTH RANGE (m)	48/56	46/87	52/54	48/56	46/87	46/87	

TABLE XVIII: AMERICAN PLAICE, DIV. 3O, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR	APR	MAY	AUG	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
24	34.7	20.1	2.2		34.7	8.0		15.2	24
26	75.4	20.1	15.3		75.4	16.9		32.8	26
28	111.7	148.7	41.7		111.7	76.2		84.6	28
30	179.5	163.4	81.6	12.3	179.5	107.9	12.3	126.0	30
32	132.3	249.1	204.4	37.0	132.3	218.8	37.0	191.3	32
34	81.1	94.9	228.0	74.1	81.1	185.1	74.1	154.1	34
36	80.5	102.3	134.5	185.2	80.5	124.1	185.2	113.2	36
38	91.8	86.7	87.3	296.3	91.8	87.1	296.3	92.4	38
40	58.3	55.6	74.7	222.2	58.3	68.6	222.2	68.7	40
42	80.1	35.5	49.5	61.7	80.1	45.0	61.7	55.1	42
44	25.2	10.6	35.0	37.0	25.2	27.1	37.0	26.8	44
46	19.0	6.5	13.0	24.7	19.0	10.9	24.7	13.4	46
48	4.7		26.3	12.3	4.7	17.8	12.3	14.1	48
50	16.3	6.5	3.2	12.3	16.3	4.3	12.3	7.7	50
52	1.6		3.2	24.7	1.6	2.2	24.7	2.4	52
54	6.9				6.9			1.9	54
56	0.8				0.8			0.2	56
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	3	6	1	3	9	1	13	
SAMPLING WEIGHT(kg)	137	44	146	50	137	190	50	377	
No. F.MEASURED	326	113	305	81	326	418	81	825	
MEAN LENGTH(cm)	34.9	34.1	36.3	39.7	34.9	35.6	39.7	35.5	
MEAN WEIGHT (g)	474	430	510	636	474	484	636	484	
DEPTH RANGE (m)	300/477	379/669	95/585	118/137	300/477	95/669	118/137	95/669	

TABLE XIX-A: YELLOWTAIL FLOUNDER, DIV. 3N, 2009: length composition (0/000) of the 130mm trawl catches

LENGTH GROUP	SEP = YEAR	LENGTH GROUP
24	6.8	24
26		26
28	20.3	28
30	81.1	30
32	114.9	32
34	209.5	34
36	297.3	36
38	182.4	38
40	60.8	40
42	20.3	42
44	6.8	44
TOTAL	1000	
No. SAMPLES	1	
SAMPLING WEIGHT(kg)	52	
No. F.MEASURED	148	
MEAN LENGTH(cm)	36.2	
MEAN WEIGHT (g)	453	
DEPTH RANGE (m)	116/124	

TABLE XIX-B: YELLOWTAIL FLOUNDER, DIV. 3N, 2009: length composition (0/000) of the 280mm trawl catches

LENGTH GROUP	MAY	AUG	SEP	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
24		4.2			2.9	2.5	24
26	3.7	19.9	20.7	3.7	20.2	17.9	26
28	4.8	79.7	34.5	4.8	65.0	56.9	28
30	46.3	102.6	151.7	46.3	118.5	108.8	30
32	83.0	224.3	179.3	83.0	209.7	192.6	32
34	168.9	273.1	289.7	168.9	278.5	263.7	34
36	327.5	141.7	172.4	327.5	151.6	175.4	36
38	219.9	84.4	124.1	219.9	97.3	113.9	38
40	86.2	42.8	13.8	86.2	33.4	40.5	40
42	39.7	27.1	13.8	39.7	22.8	25.1	42
44	8.5			8.5		1.1	44
46	11.6			11.6		1.6	46
TOTAL	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	2	1	3	3	6	
SAMPLING WEIGHT(kg)	86	61	44	86	105	191	
No. F.MEASURED	203	184	145	203	329	532	
MEAN LENGTH(cm)	37.2	34.6	34.7	37.2	34.6	35.0	
MEAN WEIGHT (g)	495	394	396	495	395	408	
DEPTH RANGE (m)	42/54	49/54	52/54	42/54	49/54	42/54	

TABLE XX: GREENLAND HALIBUT, DIV. 3L, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	1st Q.	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
28			0.3								0.2			0.1	28
30	3.2	0.4	2.2	0.6						0.6	1.4			0.9	30
32		3.0	2.8	6.6	1.0	2.8		6.0	2.1	2.8	4.1	5.2	2.1	3.9	32
34	4.3	7.2	11.8	4.5	8.5	15.1		9.8	10.6	6.9	8.8	10.9	10.6	9.1	34
36	8.7	34.0	23.9	13.5	3.4	21.0	8.8	23.7	18.0	32.0	18.4	22.8	18.0	21.4	36
38	18.1	75.3	63.0	33.1	16.1	95.1	43.9	51.0	36.4	70.9	48.1	60.9	36.4	52.9	38
40	64.3	72.9	73.6	70.6	68.6	104.5	61.4	74.5	93.2	72.2	72.1	81.1	93.2	76.0	40
42	61.0	116.9	111.9	91.6	135.4	153.6	43.9	137.4	120.8	112.6	106.3	139.7	120.8	115.1	42
44	101.7	103.3	147.9	171.8	151.9	111.0	184.2	138.8	149.5	103.2	157.1	133.1	149.5	143.1	44
46	136.5	122.1	177.5	174.1	187.0	140.6	193.0	177.8	145.4	123.2	177.0	169.6	145.4	163.5	46
48	216.4	147.7	155.6	171.3	233.1	127.7	157.9	139.1	131.7	152.9	167.7	136.8	131.7	155.8	48
50	153.3	131.0	93.1	124.7	134.4	52.7	122.8	74.1	86.2	132.7	108.2	70.0	86.2	102.7	50
52	60.6	77.1	62.0	60.3	44.7	50.0	26.3	51.5	56.8	75.8	59.9	50.8	56.8	60.5	52
54	64.6	37.7	36.0	33.9	11.9	43.2	35.1	31.5	29.1	39.7	33.3	34.2	29.1	34.0	54
56	34.9	39.5	18.5	21.7	3.9	37.9	17.5	29.3	32.0	39.2	18.5	31.1	32.0	25.6	56
58	25.2	10.2	8.0	11.1		28.9	26.3	21.2	22.8	11.3	8.5	23.0	22.8	13.2	58
60	6.5	8.1	5.8	3.8		3.1	26.3	12.0	14.5	7.9	4.6	10.2	14.5	7.2	60
62	17.9	4.8	2.3	1.5		9.8	35.1	7.0	15.4	5.8	1.8	8.0	15.4	5.1	62
64	10.4	3.9	1.2	1.3		3.1	17.5	7.6	9.1	4.4	1.1	6.7	9.1	3.5	64
66	4.3	3.7	1.4					1.5	2.4	3.8	0.8	1.2	2.4	1.5	66
68	8.2			1.3				1.2	11.5	0.6	0.5	0.9	11.5	1.8	68
70								2.2	1.3			1.6	1.3	0.4	70
72				1.3					1.0		0.5		1.0	0.4	72
74		0.6						0.9	1.3	0.5		0.7	1.3	0.4	74
76		0.4		1.3				0.6	4.3	0.4	0.5	0.5	4.3	0.9	76
78			0.6					0.6	0.9		0.3	0.5	0.9	0.4	78
80		0.3						0.6	0.7	0.3		0.5	0.7	0.2	80
82															82
84									1.5				1.5	0.2	84
86			0.6						1.5		0.3		1.5	0.3	86
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	6	21	21	21	6	3	1	10	8	27	48	14	8	97	
SAMPLING WEIGHT(kg)	551	1758	1944	1718	431	329	135	1456	1422	2309	4092	1919	1422	9742	
No. F.MEASURED	548	1828	2071	1890	508	324	114	1384	1294	2376	4469	1822	1294	9961	
MEAN LENGTH(cm)	49.2	47.3	46.7	47.3	46.9	46.4	48.6	47.2	48.1	47.4	46.9	47.0	48.1	47.2	
MEAN WEIGHT (g)	1105	970	922	957	907	918	1065	973	1067	980	934	962	1067	960	
DEPTH RANGE (m)	930/1140	845/1140	840/1192	813/1293	860/1165	855/995	1204/1246	937/1390	1009/1322	845/1140	813/1293	855/1390	1009/1322	813/1390	

TABLE XXI: GREENLAND HALIBUT, DIV. 3M, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	1st Q.	2nd Q.	3rd Q.	4th Q.	YEAR	LENGTH GROUP
28			1.0								0.6			0.4	28
30		0.5	2.3	2.4			3.2			0.5	2.3	0.4		1.7	30
32		5.8	2.0	4.6			30.1	3.3	6.3	5.5	3.0	6.0	6.3	3.8	32
34		7.7	8.7	8.4	4.4	5.8	27.9	20.2	6.3	7.3	8.5	17.4	6.3	8.7	34
36	5.0	17.0	11.8	13.1	6.5		64.5	36.1	27.5	16.3	12.3	30.3	27.5	14.7	36
38	20.1	54.2	28.9	32.0	4.4	8.7	93.1	42.1	54.9	52.2	29.7	40.0	54.9	36.0	38
40	53.9	77.5	66.0	65.4	70.0	43.4	112.6	76.6	72.1	76.2	65.8	72.6	72.1	68.6	40
42	71.0	137.9	79.9	78.7	181.1	75.1	70.6	110.0	104.3	134.0	80.9	95.5	104.3	93.8	42
44	35.5	134.8	127.0	129.5	209.6	101.2	128.0	227.2	136.8	129.0	129.3	180.6	136.8	132.4	44
46	152.6	153.2	178.0	172.5	205.1	112.8	127.6	157.0	137.7	153.2	176.2	141.4	137.7	168.0	46
48	236.9	155.0	159.8	189.8	240.1	133.0	121.7	119.0	128.9	159.8	172.9	123.1	128.9	165.7	48
50	203.2	111.9	130.9	125.5	65.6	164.7	93.5	86.1	108.4	117.2	127.8	107.9	108.4	123.7	50
52	84.6	63.1	75.1	70.9	8.8	164.7	46.6	35.8	45.9	64.3	72.5	71.4	45.9	69.8	52
54	64.5	35.8	48.4	37.4	4.4	57.8	33.2	31.3	33.1	37.5	43.4	38.6	33.1	41.5	54
56	30.5	17.6	32.1	31.3		37.6	27.9	31.4	32.7	18.3	31.3	32.6	32.7	28.7	56
58	23.7	12.1	23.3	13.5		63.6	11.2	16.4	41.9	12.7	19.1	28.2	41.9	19.0	58
60	6.8	6.6	12.1	14.9		14.5	2.7	7.4	21.3	6.6	13.0	8.6	21.3	11.7	60
62		3.2	7.1	2.0		11.6	2.7		25.0	3.0	4.9	3.4	25.0	5.1	62
64		1.7	3.6	2.6		5.8	3.2		1.7	1.6	3.2	2.0	1.7	2.7	64
66		0.8	0.8	2.3					7.2	0.7	1.4		7.2	1.4	66
68		0.6							7.2	0.6			7.2	0.4	68
70	6.8	0.7	0.4						0.9	1.0	0.2		0.9	0.4	70
72	5.0			1.6						0.3	0.6			0.5	72
74			0.4								0.2			0.2	74
76		1.8	0.4	0.8						1.7	0.5			0.7	76
78															78
80		0.6								0.6				0.1	80
82															82
84				0.8							0.3			0.2	84
86			0.05								0.03			0.02	86
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	24	37	30	2	2	3	3	3	26	69	8	3	106	
SAMPLING WEIGHT(kg)	174	2320	3652	2723	144	268	266	379	502	2494	6519	913	502	10429	
No. F.MEASURED	165	2312	3539	2817	186	209	280	392	423	2477	6542	881	423	10323	
MEAN LENGTH(cm)	49.4	47.0	48.2	48.0	46.1	50.1	45.3	46.3	48.1	47.1	48.1	47.2	48.1	47.8	
MEAN WEIGHT (g)	1099	942	1021	1008	855	1152	850	895	1046	951	1013	957	1046	998	
DEPTH RANGE (m)	901/1125	735/2200	765/1218	735/1228	1001/1117	926/1060	954/1022	944/1120	884/1073	735/2200	735/1228	926/1120	884/1073	735/2200	

TABLE XXII: GREENLAND HALIBUT, DIV. 3N, 2009:
length composition (0/000) of the 130mm trawl catches

LENGTH GROUP	MAR =1st Q.	APR =2nd Q.	AUG =3rd Q.	YEAR	LENGTH GROUP
30			14.7	3.6	30
32					32
34			44.1	10.8	34
36		37.7	29.4	11.4	36
38	25.4	18.9	44.1	29.3	38
40	18.0	37.7	102.9	41.0	40
42	54.1	94.3	58.8	59.8	42
44	134.8	37.7	73.5	108.9	44
46	195.4	207.5	117.6	177.7	46
48	267.5	132.1	161.8	226.4	48
50	174.1	132.1	147.1	162.7	50
52	54.1	113.2	58.8	61.9	52
54	19.1	56.6	73.5	36.7	54
56	19.1	56.6	44.1	29.5	56
58	9.6	37.7	29.4	17.6	58
60	19.1	18.9		14.4	60
62	9.6			6.1	62
64		18.9		2.1	64
TOTAL	1000	1000	1000	1000	
No. SAMPLES	2	1	1	4	
SAMPLING WEIGHT(kg	108	65	75	248	
No. F.MEASURED	109	53	68	230	
MEAN LENGTH(cm)	48.6	49.3	47.2	48.4	
MEAN WEIGHT (g)	1042	1111	976	1034	
DEPTH RANGE (m)	771/1240	1032/1193	669/688	669/1240	

TABLE XXIII: GREENLAND HALIBUT, DIV. 3O, 2009:
length composition (0/000) of the 130mm trawl catches

LENGTH GROUP	MAR =1st Q.	APR =2nd Q.	YEAR	LENGTH GROUP
32		19.5	16.4	32
34				34
36		64.0	54.0	36
38	37.0	64.0	59.8	38
40	74.1	124.0	116.2	40
42	111.1	262.0	238.4	42
44	222.2	189.5	194.6	44
46	240.7	53.0	82.4	46
48	148.1	33.5	51.5	48
50	92.6	44.5	52.0	50
52	37.0	69.5	64.4	52
54		25.0	21.1	54
56	18.5	25.0	24.0	56
58	18.5	12.5	13.4	58
60		7.0	5.9	60
62		7.0	5.9	62
TOTAL	1000	1000	1000	
No. SAMPLES	1	2	3	
SAMPLING WEIGHT(kg)	47	89	137	
No. F.MEASURED	54	102	156	
MEAN LENGTH(cm)	46.7	44.9	45.2	
MEAN WEIGHT (g)	908	821	835	
DEPTH RANGE (m)	539/561	604/1383	539/1383	

TABLE XXIV: ROUGHHEAD GRENADIER, DIV. 3L, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
6			0.8							0.4		0.2	6
7		2.2	6.0	3.6		6.1	9.3		1.8	4.5	1.4	2.6	7
8		8.7	20.5	15.8		24.2	9.3	8.9	7.5	16.3	11.8	13.3	8
9	2.1	37.2	54.8	31.7		42.4	56.1	62.5	32.1	40.2	58.6	49.5	9
10		79.0	87.9	72.9		103.0	102.8	125.0	67.6	71.9	120.3	97.7	10
11	4.2	130.7	179.5	130.9	1.7	175.8	149.5	232.1	112.3	141.0	219.5	181.3	11
12	32.5	185.3	294.6	180.2	12.6	272.7	271.0	294.6	163.1	220.8	290.0	254.0	12
13	75.4	141.9	154.1	98.1	39.2	145.5	158.9	169.6	132.3	120.9	164.9	145.4	13
14	156.3	93.3	82.5	108.6	82.3	103.0	130.8	44.6	102.4	91.3	57.8	74.0	14
15	228.8	133.9	48.4	106.3	194.6	54.5	37.4	26.8	147.7	86.1	32.2	61.4	15
16	201.8	68.3	22.3	100.7	265.6	12.1	18.7	26.8	87.6	79.0	23.9	49.9	16
17	130.1	46.0	10.2	58.6	155.7	24.2	28.0	8.9	58.2	44.6	12.3	28.1	17
18	64.0	30.7	21.7	37.1	141.1	18.2	9.3		35.5	41.7	3.6	20.7	18
19	56.9	13.9	5.6	19.2	65.8	6.1	9.3		20.1	17.7	1.4	9.1	19
20	12.3	9.4	1.2	13.7	22.2	12.1			9.8	8.1	2.2	5.0	20
21	21.3	7.8	2.4	6.3	9.6		9.3		9.8	4.6	0.2	2.6	21
22	7.9	6.4	2.4	2.7	9.5				6.6	3.4		1.8	22
23	2.1	3.4	2.7	3.1					3.2	2.5		1.2	23
24	2.1	2.0	2.3	2.1					2.1	2.0		0.9	24
25	2.1			2.0					0.3	0.7		0.3	25
26				2.1						0.7		0.3	26
27				2.9						1.0		0.4	27
28													28
29													29
30				0.8						0.3		0.1	30
31													31
32													32
33				0.8						0.3		0.1	33
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	4	12	12	16	6	1	1	1	16	34	3	53	
SAMPLING WEIGHT(kg)	143	503	504	609	188	65	45	39	645	1301	149	2095	
No. F.MEASURED	337	1034	1313	1387	436	165	107	112	1371	3136	384	4891	
MEAN LENGTH(cm)	16.2	13.8	12.8	14.1	16.8	12.8	12.8	12.3	14.2	13.7	12.4	13.0	
MEAN WEIGHT (g)	529	374	307	400	567	305	312	272	397	371	279	323	
DEPTH RANGE (m)	960/1102	888/1140	856/1192	867/1234	860/1165	940/942	1204/1246	1003/1051	888/1140	856/1234	940/1246	856/1246	

TABLE XXV: ROUGHHEAD GRENADIER, DIV. 3M, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUN	AUG	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
5			0.5					0.3		0.2	5
6			1.8	1.9				1.8		1.4	6
7		2.8	3.5	6.0		16.7	2.7	4.4	16.7	4.7	7
8	11.5	16.8	18.0	15.1		16.7	16.6	16.4	16.7	16.5	8
9	5.7	38.4	51.6	41.0		33.3	37.2	46.2	33.3	44.0	9
10	25.1	86.6	82.5	72.8		58.3	84.2	76.8	58.3	77.2	10
11	13.6	155.2	157.8	123.0		133.3	149.7	140.3	133.3	141.6	11
12	22.9	298.6	277.8	232.1	41.1	316.7	287.8	254.2	316.7	263.1	12
13	27.3	157.7	170.9	152.3	137.0	141.7	152.6	162.7	141.7	159.9	13
14	111.4	79.4	71.9	98.0	191.8	150.0	80.6	85.1	150.0	87.5	14
15	161.6	69.2	44.3	77.9	232.9	50.0	72.8	62.0	50.0	63.3	15
16	147.4	33.6	28.6	57.2	260.3	16.7	38.0	45.3	16.7	42.6	16
17	131.6	20.7	23.6	42.7	95.9	33.3	25.0	32.9	33.3	31.5	17
18	122.8	11.0	15.9	28.7	27.4	25.0	15.4	21.3	25.0	20.4	18
19	58.2	10.6	11.0	15.3	13.7		12.4	12.8		12.1	19
20	37.4	8.7	7.5	8.0		8.3	9.8	7.6	8.3	8.0	20
21	21.6	3.0	7.5	10.8			3.7	8.7		7.4	21
22	22.9	1.8	9.9	5.5			2.6	7.9		6.6	22
23	11.5	2.9	4.7	5.9			3.2	5.1		4.5	23
24	5.7	3.1	4.6				3.2	2.6		2.6	24
25	13.6		2.1	1.9			0.5	2.0		1.6	25
26			0.6					0.3		0.3	26
27			0.5	1.9				1.0		0.8	27
28	19.4	0.1	0.8	1.9			0.9	1.2		1.1	28
29	11.5		0.5				0.4	0.3		0.3	29
30			0.5					0.3		0.2	30
31			1.1					0.6		0.5	31
32											32
33	17.2						0.7			0.1	33
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	15	23	23	1	1	17	47	1	65	
SAMPLING WEIGHT(kg)	86	781	960	812	25	52	867	1797	52	2716	
No. F.MEASURED	147	1642	2221	1981	73	120	1789	4275	120	6184	
MEAN LENGTH(cm)	17.5	13.1	13.2	13.7	15.5	13.0	13.2	13.4	13.0	13.4	
MEAN WEIGHT (g)	702	325	348	374	459	320	340	361	320	355	
DEPTH RANGE (m)	901/1125	805/1127	888/1218	871/1228	1001/1117	1018/1022	805/1127	871/1228	1018/1022	805/1228	

TABLE XXVI : ROUGHHEAD GRENADIER, DIV. 3N, 2009:
length composition (0/000) of the 130mm trwal catches

LENGTH GROUP	MAR =1st Q.	APR =2nd Q.	YEAR	LENGTH GROUP
7	4.7	9.7	5.3	7
8	9.4	29.1	11.9	8
9	56.7	58.3	56.9	9
10	71.8	106.8	76.2	10
11	165.9	155.3	164.6	11
12	251.2	291.3	256.2	12
13	114.4	145.6	118.3	13
14	53.6	48.5	52.9	14
15	58.2	48.5	57.0	15
16	93.1	29.1	85.0	16
17	14.6		12.7	17
18	44.2	38.8	43.5	18
19	28.6	19.4	27.4	19
20	14.6	9.7	13.9	20
21	19.2		16.8	21
22		9.7	1.2	22
TOTAL	1000	1000	1000	
No. SAMPLES	2	1	3	
SAMPLING WEIGHT(kg)	72	42	113	
No. F.MEASURED	167	103	270	
MEAN LENGTH(cm)	13.6	12.8	13.5	
MEAN WEIGHT (g)	362	321	357	
DEPTH RANGE (m)	771/1240	1032/1193	771/1240	

TABLE XXVII: ROUGHHEAD GRENADIER, DIV. 3O, 2009:
length composition (0/000) of the 130mm trawl catches

LENGTH GROUP	APR = YEAR	LENGTH GROUP
8	14.7	8
9	14.7	9
10	73.5	10
11	279.4	11
12	220.6	12
13	132.4	13
14	132.4	14
15	58.8	15
16		16
17	29.4	17
18	14.7	18
19	14.7	19
20	14.7	20
TOTAL	1000	
No. SAMPLES	1	
SAMPLING WEIGHT(kg)	29	
No. F.MEASURED	68	
MEAN LENGTH(cm)	13.0	
MEAN WEIGHT (g)	323	
DEPTH RANGE (m)	1010/1383	

TABLE XXVIII: WITCH FLOUNDER, DIV. 3L, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR =1st Q.	APR =2nd Q.	YEAR	LENGTH GROUP
26		14.9	9.3	26
28		29.9	18.7	28
30	14.4	134.3	89.5	30
32	88.4	164.2	135.9	32
34	49.6	74.6	65.3	34
36	143.7	179.1	165.9	36
38	33.8	74.6	59.4	38
40	257.2	164.2	198.9	40
42	135.0	14.9	59.8	42
44	171.6	104.5	129.6	44
46	52.4	44.8	47.6	46
48	53.8		20.1	48
TOTAL	1000	1000	1000	
No. SAMPLES	2	1	3	
SAMPLING WEIGHT(kg)	60	27	87	
No. F.MEASURED	138	67	205	
MEAN LENGTH(cm)	40.9	37.2	38.6	
MEAN WEIGHT (g)	464	376	409	
DEPTH RANGE (m)	870/975	845/950	845/975	

TABLE XXIX: WITCH FLOUNDER, DIV. 3O, 2009: length composition (0/000) of the 130mm trawl catches

LENGTH GROUP	MAR	APR	MAY	AUG	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
18			0.4			0.2		0.1	18
20									20
22	1.0		0.4		1.0	0.2		0.3	22
24	1.7		0.9		1.7	0.3		0.5	24
26	17.3	9.2	4.0		17.3	7.2		8.2	26
28	46.0	36.8	27.9		46.0	33.4		33.7	28
30	48.5	39.9	41.4	11.8	48.5	40.4	11.8	40.3	30
32	57.8	95.3	74.4	11.8	57.8	87.3	11.8	80.7	32
34	91.8	200.1	156.3	105.9	91.8	183.4	105.9	169.0	34
36	123.1	223.5	169.3	152.9	123.1	202.9	152.9	190.9	36
38	179.6	173.8	216.6	329.4	179.6	190.1	329.4	194.2	38
40	133.9	108.2	69.2	188.2	133.9	93.3	188.2	102.1	40
42	169.4	47.8	67.5	152.9	169.4	55.3	152.9	73.4	42
44	72.2	40.2	88.9	23.5	72.2	58.8	23.5	59.1	44
46	28.4	12.8	60.7	11.8	28.4	31.0	11.8	29.9	46
48	12.1	12.4	11.0	11.8	12.1	11.9	11.8	11.9	48
50	7.8		4.6		7.8	1.7		2.4	50
52	7.8		6.5		7.8	2.5		3.0	52
54	1.7				1.7			0.2	54
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	3	6	1	3	9	1	13	
SAMPLING WEIGHT(kg	134	70	164	39	134	234	39	407	
No. F.MEASURED	318	173	427	85	318	600	85	1003	
MEAN LENGTH(cm)	38.9	37.3	38.6	39.4	38.9	37.8	39.4	38.0	
MEAN WEIGHT (g)	414	351	400	416	414	369	416	377	
DEPTH RANGE (m)	453/506	379/669	96/585	313/317	453/506	96/669	313/317	96/669	

TABLE XXX: ATLANTIC HALIBUT, DIV. 3N, 2009:
length composition (0/000) of the 130mm trawl catches

LENGTH GROUP	MAR =1st Q.	APR =2nd Q.	YEAR	LENGTH GROUP
46		28.5	13.6	46
48				48
50				50
52		28.5	13.6	52
54				54
56				56
58	66.7		34.9	58
60	66.7	15.9	42.5	60
62	66.7	44.4	56.1	62
64	133.3	47.7	92.5	64
66	66.7	28.5	48.5	66
68		92.4	44.0	68
70				70
72	66.7	124.5	94.2	72
74	200.0	15.9	112.3	74
76		188.3	89.7	76
78	66.7	44.4	56.1	78
80		63.9	30.4	80
82		48.0	22.9	82
84		44.4	21.2	84
86				86
88		63.9	30.4	88
90	66.7	76.5	71.3	90
92		28.5	13.6	92
94				94
96	133.3		69.8	96
98				98
100				100
102				102
104				104
106				106
108		15.9	7.6	108
110				110
112				112
114	66.7		34.9	114
TOTAL	1000	1000	1000	
No. SAMPLES	1	3	4	
SAMPLING WEIGHT(kg)	121	214	335	
No. F.MEASURED	15	34	49	
MEAN LENGTH(cm)	77.1	76.2	76.7	
MEAN WEIGHT (g)	7826	6374	7134	
DEPTH RANGE (m)	372/458	371/685	371/685	

TABLE XXXI: ATLANTIC HALIBUT, DIV. 3O, 2009: length composition (0/000) of the 130mm trawl catches

LENGTH GROUP	MAR	APR	MAY	1st Q.	2nd Q.	YEAR	LENGTH GROUP
58			20.3		14.8	10.1	58
60	59.8	90.9	40.2	59.8	54.0	55.9	60
62	59.8	90.9	71.5	59.8	76.8	71.4	62
64	59.8	90.9	42.5	59.8	55.7	57.0	64
66	222.3	90.9	76.2	222.3	80.2	125.2	66
68	46.4		8.1	46.4	5.9	18.7	68
70	96.4		71.5	96.4	52.1	66.1	70
72	59.8	90.9	159.4	59.8	140.8	115.1	72
74		90.9	26.9		44.3	30.3	74
76		181.8	68.6		99.3	67.9	76
78	96.4	90.9	83.2	96.4	85.3	88.8	78
80	23.2		53.2	23.2	38.8	33.8	80
82	96.4	90.9	28.6	96.4	45.6	61.7	82
84	23.2	90.9	92.5	23.2	92.0	70.3	84
86	23.2		68.9	23.2	50.2	41.6	86
88			29.6		21.5	14.7	88
90			26.1		19.0	13.0	90
92	23.2		32.7	23.2	23.8	23.6	92
94							94
96	73.2			73.2		23.2	96
98							98
100							100
102							102
104	36.6			36.6		11.6	104
TOTAL	1000	1000	1000	1000	1000	1000	
No. SAMPLES	2	1	6	2	7	9	
SAMPLING WEIGHT(kg)	202	51	354	202	405	607	
No. F.MEASURED	35	11	61	35	72	107	
MEAN LENGTH(cm)	75.2	73.2	75.8	75.2	75.1	75.1	
MEAN WEIGHT (g)	6206	4981	5915	6206	5661	5834	
DEPTH RANGE (m)	320/561	404/519	374/522	320/561	374/522	320/561	

TABLE XXXII: THORNY SKATE, DIV. 3L, 2009: length composition (0/000) of the 130mm trawl catches

LENGTH GROUP	APR	MAY	2nd Q. = YEAR	LENGTH GROUP
34	41.8		11.9	34
36	13.7		3.9	36
38				38
40	73.8		21.0	40
42	36.5	13.3	19.9	42
44	115.0	26.7	51.8	44
46	110.3	186.7	165.0	46
48	110.3	146.7	136.3	48
50	129.2	160.0	151.3	50
52	87.5	133.3	120.3	52
54	124.7	66.7	83.2	54
56	64.6	120.0	104.3	56
58		40.0	28.6	58
60	92.7	66.7	74.1	60
62		26.7	19.1	62
64		13.3	9.5	64
TOTAL	1000	1000	1000	
No. SAMPLES	3	1	4	
SAMPLING WEIGHT(kg)	326	116	442	
No. F.MEASURED	54	75	129	
MEAN LENGTH(cm)	49.2	51.9	51.2	
MEAN WEIGHT (g)	1318	1477	1432	
DEPTH RANGE (m)	856/945	813/993	813/993	

TABLE XXXIII: THORNY SKATE, DIV. 3M, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	FEB	MAR	APR	MAY	JUL	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
28			5.8	37.7		21.9			11.0	8.6	7.2	28
30		5.4			31.3	21.9		5.3		14.7	8.0	30
32		1.7	13.6	43.8	31.3	43.8	31.3	1.6	18.5	36.2	22.5	32
34		34.1	15.1	81.5	31.3	131.5	188.0	33.4	26.0	135.3	77.5	34
36		50.9	51.1	72.7	31.3	109.6	62.7	49.7	54.6	74.9	62.7	36
38	28.6	35.7	79.7	88.6	156.3	175.4	156.7	35.6	81.1	163.9	107.7	38
40		113.8	112.5	128.8	31.3	131.5	31.3	111.1	115.2	70.5	93.9	40
42	28.6	75.7	91.1	156.2	93.8	87.7	166.0	74.6	101.7	121.3	104.0	42
44		52.4	50.0	94.5	156.3	87.7	66.4	51.2	57.3	92.3	71.7	44
46	28.6	87.3	110.4	92.1	125.0	67.4	197.3	86.0	107.4	132.4	113.6	46
48		48.6	72.8	79.8	93.8	28.4	42.5	47.4	73.9	47.0	55.3	48
50	142.9	76.3	62.1	70.0	62.5	25.2	5.6	77.9	63.4	24.4	49.2	50
52	200.0	111.1	53.2	19.3	93.8	6.5	9.3	113.2	47.6	24.7	53.1	52
54	57.1	74.3	85.2	35.0	62.5			73.9	76.9	12.2	46.8	54
56	57.1	46.6	54.9			9.7		46.9	45.9	3.8	27.0	56
58		76.9	27.9			14.6	11.2	75.1	23.3	10.3	30.0	58
60	57.1	49.9	44.2			17.8	11.2	50.1	36.9	11.6	28.6	60
62		17.7	26.5			12.9	7.5	17.3	22.2	8.1	14.6	62
64		23.7	17.7			1.6	3.7	23.1	14.8	2.2	11.1	64
66	28.6					1.6	5.6	0.7		2.9	1.5	66
68		11.8	17.7			1.6	1.9	11.6	14.8	1.4	7.9	68
70		5.9	8.8			1.6	1.9	5.8	7.4	1.4	4.3	70
72												72
74	28.6							0.7			0.2	74
76												76
78	85.7							2.0			0.5	78
80												80
82	57.1							1.3			0.3	82
84	85.7							2.0			0.5	84
86	28.6							0.7			0.2	86
88	57.1							1.3			0.3	88
90												90
92												92
94												94
96												96
98												98
100												100
102	28.6							0.7			0.2	102
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	1	7	13	4	1	2	2	8	17	5	30	
SAMPLING WEIGHT(kg)	89	636	1276	205	155	246	192	725	1481	593	2799	
No. F.MEASURED	35	176	290	47	32	91	78	211	337	201	749	
MEAN LENGTH(cm)	64.3	49.0	48.0	42.0	44.3	40.8	41.8	49.3	47.0	41.9	45.2	
MEAN WEIGHT (g)	2680	1326	1269	911	1027	862	904	1357	1210	911	1110	
DEPTH RANGE (m)	901/973	291/1086	271/1106	292/1109	275/280	247/277	265/294	291/1086	271/1109	247/294	247/1109	

TABLE XXXIV-A: THORNY SKATE, DIV. 3N, 2009: length composition (0/000) of the 130mm trawl catches

LENGTH GROUP	MAR = YEAR	LENGTH GROUP
34	28.6	34
36	24.0	36
38	81.2	38
40	48.1	40
42	239.1	42
44	76.7	44
46	230.0	46
48	81.2	48
50	81.2	50
52	81.2	52
54		54
56	28.6	56
TOTAL	1000	
No. SAMPLES	2	
SAMPLING WEIGHT(kg)	177	
No. F.MEASURED	38	
MEAN LENGTH(cm)	45.1	
MEAN WEIGHT (g)	1062	
DEPTH RANGE (m)	324/1183	

TABLE XXXIV-B: THORNY SKATE, DIV. 3N, 2009: length composition (0/000) of the 280mm trawl catches

LENGTH GROUP	MAY	AUG	SEP	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
26		3.9			3.5	3.2	26
28							28
30	4.3	18.0	15.6	4.3	17.8	16.5	30
32	4.3	58.4	15.6	4.3	54.5	49.8	32
34	40.7	114.2	31.3	40.7	106.6	100.5	34
36	22.5	92.1	46.9	22.5	88.0	81.9	36
38	100.0	103.7	78.1	100.0	101.3	101.2	38
40	135.9	124.5	218.8	135.9	133.1	133.4	40
42	209.1	169.8	140.6	209.1	167.1	171.0	42
44	204.3	117.5	218.8	204.3	126.8	133.9	44
46	66.1	77.7	140.6	66.1	83.4	81.8	46
48	106.0	45.3	31.3	106.0	44.0	49.7	48
50	56.7	72.5	31.3	56.7	68.7	67.6	50
52	38.5	2.6	15.6	38.5	3.8	7.0	52
54	11.7		15.6	11.7	1.4	2.4	54
TOTAL	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	3	1	3	4	7	
SAMPLING WEIGHT(kg)	586	569	288	586	857	1443	
No. F.MEASURED	130	135	64	130	199	329	
MEAN LENGTH(cm)	43.6	40.9	42.7	43.6	41.1	41.3	
MEAN WEIGHT (g)	975	849	928	975	856	867	
DEPTH RANGE (m)	48/56	46/87	48/50	48/56	46/87	46/87	

TABLE XXXV: THORNY SKATE, DIV. 3O, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR =1st Q.	MAY =2nd Q.	YEAR	LENGTH GROUP
28	61.3		10.0	28
30	122.7	5.6	24.8	30
32	61.3	18.4	25.4	32
34	61.3	39.8	43.3	34
36	61.3	58.0	58.6	36
38	65.8	105.4	98.9	38
40	70.2	156.7	142.5	40
42	140.5	139.0	139.2	42
44	131.6	157.0	152.8	44
46	197.3	104.6	119.8	46
48	17.8	120.4	103.6	48
50	4.5	48.7	41.5	50
52		31.0	25.9	52
54	4.5	15.4	13.6	54
TOTAL	1000	1000	1000	
No. SAMPLES	2	6	8	
SAMPLING WEIGHT(kg)	134	772	907	
No. F.MEASURED	33	168	201	
MEAN LENGTH(cm)	39.5	43.2	42.6	
MEAN WEIGHT (g)	793	959	932	
DEPTH RANGE (m)	300/504	96/585	96/585	

TABLE XXXVI: SPINYTAIL SKATE, DIV. 3L, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR	APR	MAY	JUL	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
20		9.7	14.9			11.8		8.8	20
22		9.7				5.9		4.4	22
24									24
26									26
28									28
30									30
32		9.7	14.9			11.8		8.8	32
34		9.7				5.9		4.4	34
36	20.4	9.7	14.9		20.4	11.8		13.2	36
38		9.7	14.9			11.8		8.8	38
40	40.8	19.4	29.9		40.8	23.5		26.3	40
42	20.4	9.7	59.7		20.4	29.4		26.3	42
44		58.3	14.9			41.2		30.7	44
46	61.2	29.1	14.9		61.2	23.5		30.7	46
48	40.8	38.8	59.7		40.8	47.1		43.9	48
50	61.2	87.4	59.7		61.2	76.5		70.2	50
52	81.6	48.5	29.9		81.6	41.2		48.2	52
54	40.8	29.1	44.8		40.8	35.3		35.1	54
56	61.2	48.5	14.9	111.1	61.2	35.3	111.1	43.9	56
58		58.3	44.8			52.9		39.5	58
60	122.4	126.2	74.6	222.2	122.4	105.9	222.2	114.0	60
62	102.0	38.8	104.5	111.1	102.0	64.7	111.1	74.6	62
64	122.4	135.9	89.6	222.2	122.4	117.6	222.2	122.8	64
66	61.2	68.0	74.6		61.2	70.6		65.8	66
68	61.2	58.3	74.6	222.2	61.2	64.7	222.2	70.2	68
70	61.2	29.1	74.6		61.2	47.1		48.2	70
72		48.5	59.7	111.1		52.9	111.1	43.9	72
74	40.8	9.7	14.9		40.8	11.8		17.5	74
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	4	9	6	1	4	15	1	20	
SAMPLING WEIGHT(kg)	353	729	505	85	353	1235	85	1673	
No. F.MEASURED	49	103	67	9	49	170	9	228	
MEAN LENGTH(cm)	58.5	57.2	58.0	64.3	58.5	57.5	64.3	58.0	
MEAN WEIGHT (g)	7142	6845	7180	8838	7142	6977	8838	7086	
DEPTH RANGE (m)	916/1140	862/1192	878/1234	855/948	916/1140	862/1234	855/948	855/1234	

TABLE XXXVII: SPINYTAIL SKATE, DIV. 3M, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR	APR	MAY	AUG	SEP	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
18	8.5	5.0				8.5	3.6		4.7	18
20										20
22										22
24										24
26	8.5					8.5			2.4	26
28										28
30	8.5	5.0	12.5			8.5	7.1		7.1	30
32	8.5	5.0				8.5	3.6		4.7	32
34			25.0				7.1		4.7	34
36	16.9	19.9	12.5			16.9	17.8		16.5	36
38	16.9	29.9	50.0			16.9	35.6		28.3	38
40	33.9	14.9	12.5			33.9	14.2		18.9	40
42	16.9	24.9	62.5			16.9	35.6		28.3	42
44	25.4	34.8	25.0			25.4	32.0		28.3	44
46	25.4	39.8	62.5			25.4	46.3		37.7	46
48	84.7	59.7	50.0	83.3	76.9	84.7	56.9	80.0	66.0	48
50	76.3	54.7	62.5			76.3	56.9		59.0	50
52	93.2	69.7	37.5		76.9	93.2	60.5	40.0	68.4	52
54	59.3	79.6	100.0	83.3	153.8	59.3	85.4	120.0	80.2	54
56	42.4	54.7	12.5		76.9	42.4	42.7	40.0	42.5	56
58	59.3	29.9	62.5	166.7	76.9	59.3	39.1	120.0	49.5	58
60	76.3	89.6	87.5	166.7	153.8	76.3	89.0	160.0	89.6	60
62	59.3	74.6	75.0	250.0		59.3	74.7	120.0	73.1	62
64	84.7	104.5	37.5	166.7	307.7	84.7	85.4	240.0	94.3	64
66	50.8	79.6	62.5			50.8	74.7		63.7	66
68	50.8	39.8	87.5	83.3	76.9	50.8	53.4	80.0	54.2	68
70	25.4	44.8	37.5			25.4	42.7		35.4	70
72	25.4	29.9	25.0			25.4	28.5		25.9	72
74	33.9	10.0				33.9	7.1		14.2	74
76										76
78	8.5					8.5			2.4	78
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	9	17	8	1	1	9	25	2	36	
SAMPLING WEIGHT(kg)	784	1375	514	90	94	784	1889	184	2857	
No. F.MEASURED	118	201	80	12	13	118	281	25	424	
MEAN LENGTH(cm)	56.0	56.7	55.2	60.5	59.4	56.0	56.3	59.9	56.4	
MEAN WEIGHT (g)	6532	6668	6255	7520	7203	6532	6550	7355	6593	
DEPTH RANGE (m)	880/1113	888/1218	926/1218	987/1018	944/1000	880/1113	888/1218	944/1018	880/1218	

TABLE XXXVIII: SPINYTAIL SKATE, DIV. 3N, 2009:
length composition (0/000) of the 130mm trawl catches

LENGTH GROUP	MAR =1st Q.	APR =2nd Q.	YEAR	LENGTH GROUP
40		100.0	32.3	40
42				42
44				44
46	47.6		32.3	46
48	47.6		32.3	48
50	142.9	100.0	129.0	50
52				52
54		100.0	32.3	54
56	47.6		32.3	56
58	47.6		32.3	58
60	142.9	200.0	161.3	60
62		200.0	64.5	62
64	142.9	200.0	161.3	64
66	142.9		96.8	66
68	95.2	100.0	96.8	68
70	95.2		64.5	70
72	47.6		32.3	72
TOTAL	1000	1000	1000	
No. SAMPLES	2	1	3	
SAMPLING WEIGHT(kg)	205	71	276	
No. F.MEASURED	21	10	31	
MEAN LENGTH(cm)	61.3	58.9	60.5	
MEAN WEIGHT (g)	7962	7161	7704	
DEPTH RANGE (m)	771/1240	1032/1193	771/1240	

TABLE XXXIX: WHITE HAKE, DIV. 3O, 2009: length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR	APR	MAY	AUG	1st Q.	2nd Q.	3rd Q.	YEAR	LENGTH GROUP
29	3.8		9.8	19.2	3.8	4.0	19.2	7.6	29
30			2.7			1.1		0.7	30
31		28.6	13.0			22.3		14.6	31
32	30.5		19.6		30.5	7.9		8.3	32
33			17.4			7.0		4.6	33
34			5.5	38.5		2.2	38.5	10.8	34
35		49.2	2.7	19.2		30.4	19.2	24.6	35
36	7.6	28.6	22.7	19.2	7.6	26.2	19.2	22.6	36
37	3.8	12.0	39.0	38.5	3.8	22.9	38.5	24.7	37
38		64.7	7.6			41.6		27.3	38
39	34.3	36.6	18.1		34.3	29.1		22.6	39
40	12.4	87.0	23.9		12.4	61.5		41.6	40
41	26.7	13.2	28.7	19.2	26.7	19.5	19.2	20.2	41
42	38.6	52.1	4.8	38.5	38.6	33.0	38.5	34.9	42
43	12.9	105.8	59.8		12.9	87.2		58.6	43
44	47.7	78.4	44.6	19.2	47.7	64.7	19.2	52.0	44
45	77.8	28.6	100.2		77.8	57.6		45.7	45
46	88.3	59.6	42.6	76.9	88.3	52.7	76.9	62.2	46
47	94.5	136.2	50.2	38.5	94.5	101.4	38.5	85.5	47
48	73.5	53.2	72.8		73.5	61.1		47.6	48
49	37.7	35.0	61.4	57.7	37.7	45.6	57.7	47.7	49
50	31.0	71.6	44.2	38.5	31.0	60.5	38.5	52.2	50
51	61.1	5.2	33.4	96.2	61.1	16.6	96.2	40.3	51
52	12.4	4.0	61.7	134.6	12.4	27.4	134.6	51.8	52
53	82.1	24.6	30.0	115.4	82.1	26.8	115.4	53.8	53
54	70.1	10.3	27.8		70.1	17.4		18.6	54
55	11.4	5.2	34.9	38.5	11.4	17.2	38.5	21.8	55
56	26.7		27.3	19.2	26.7	11.0	19.2	14.6	56
57		5.2	27.3	19.2		14.1	19.2	13.9	57
58	57.7		32.7	96.2	57.7	13.2	96.2	37.8	58
59		5.2	7.2	19.2		6.0	19.2	8.6	59
60	3.8		15.4	38.5	3.8	6.2	38.5	13.8	60
61	26.7		8.1		26.7	3.3		4.9	61
62			2.7			1.1		0.7	62
63									63
64									64
65									65
66									66
67	26.7				26.7			2.7	67
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	
No. SAMPLES	3	3	6	1	3	9	1	13	
SAMPLING WEIGHT(kg)	140	89	223	73	140	313	73	525	
No. F.MEASURED	112	95	183	52	112	278	52	442	
MEAN LENGTH(cm)	49.2	44.2	47.3	49.8	49.2	45.5	49.8	46.9	
MEAN WEIGHT (g)	1331	913	1185	1399	1331	1023	1399	1145	
DEPTH RANGE (m)	320/560	345/572	374/522	388/399	320/560	345/572	388/399	320/572	

TABLE XL: HADDOCK, DIV. 3M, 2009:
length composition (0/000) of the 130mm trawl catches.

LENGTH GROUP	MAR = YEAR	LENGTH GROUP
30	28.2	30
31		31
32	14.1	32
33	70.4	33
34	28.2	34
35	28.2	35
36	140.8	36
37	14.1	37
38	56.3	38
39		39
40	28.2	40
41	14.1	41
42	14.1	42
43	14.1	43
44	84.5	44
45	28.2	45
46	70.4	46
47	84.5	47
48	154.9	48
49	98.6	49
50		50
51	28.2	51
TOTAL	1000	

No. SAMPLES	1
SAMPLING WEIGHT(kg)	46
No. F.MEASURED	71
MEAN LENGTH(cm)	42.1
MEAN WEIGHT (g)	636
DEPTH RANGE (m)	288/289

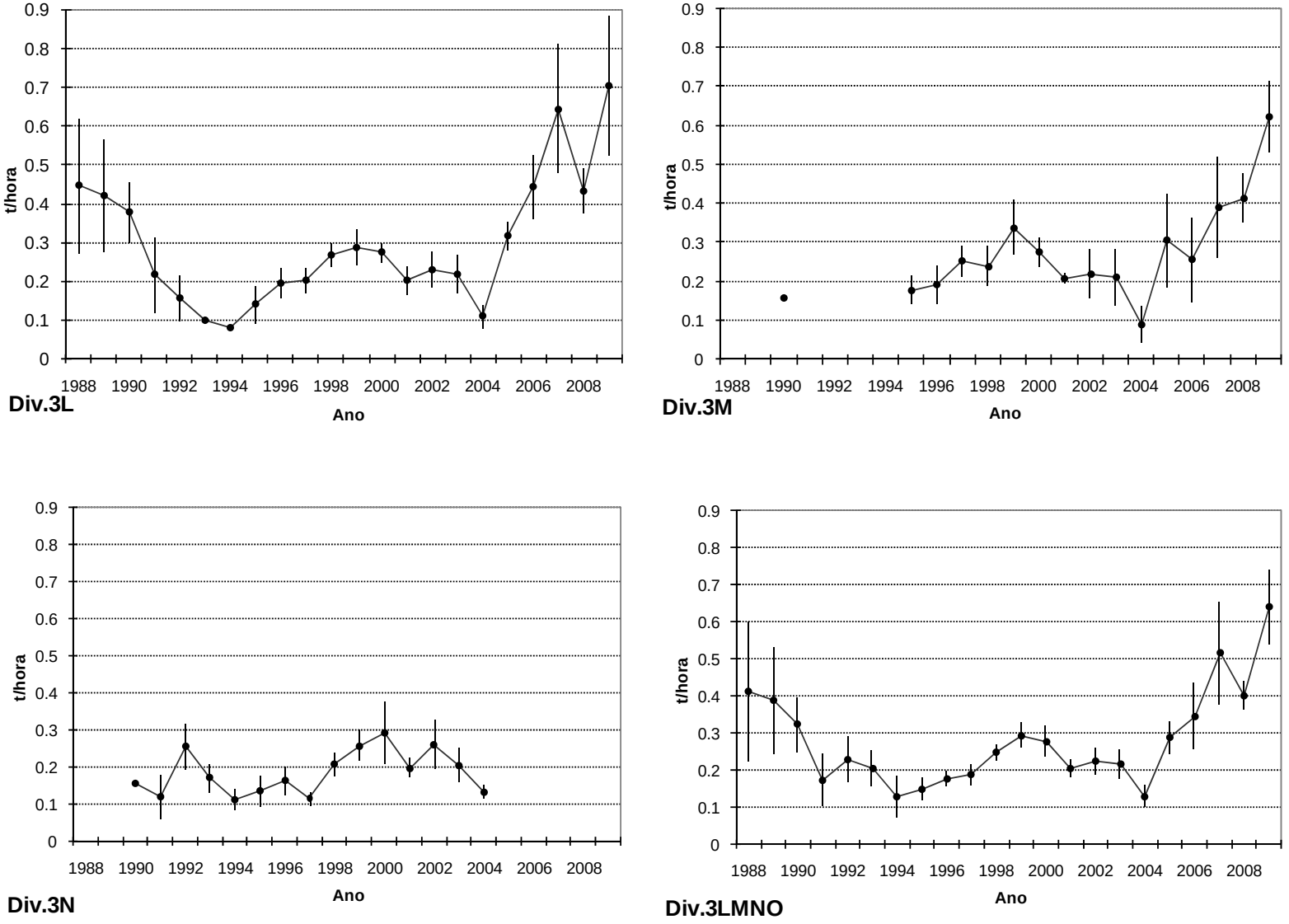

Fig. 1: Greenland halibut trawl catch rates by division, 1988 - 2009.

Fig. 2 - Annual length composition of Cod on Division 3M 130mm trawl fishery in 2009

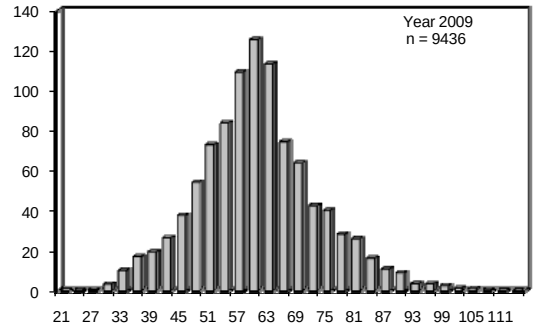

Fig. 3A - Annual length composition of Cod on Division 3N 130mm trawl fishery in 2009.

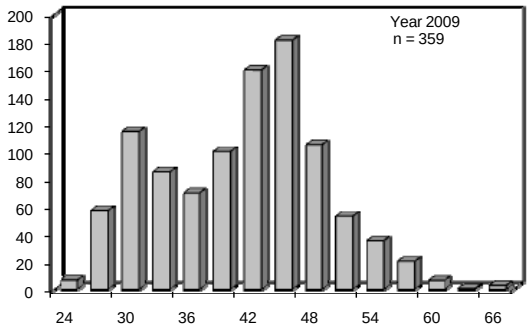

Fig. 3B - Annual length composition of Cod on Division 3N 280mm trawl fishery in 2009.

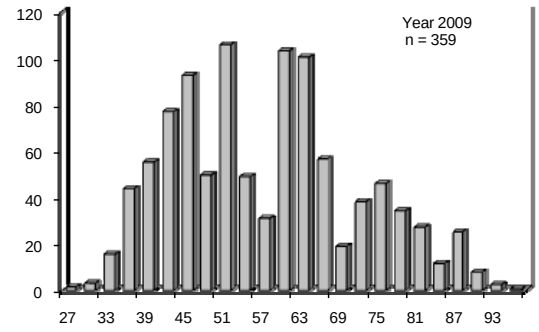

Fig. 4 - Annual length composition of Cod on Division 3O 130mm trawl fishery in 2009.

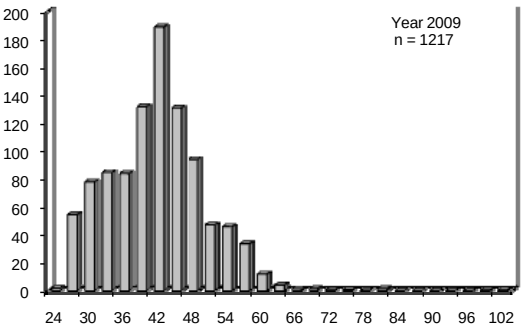

Fig. 5 - Annual length composition of Redfish (*S. mentella*) on Division 3L 130mm trawl fishery in 2009.

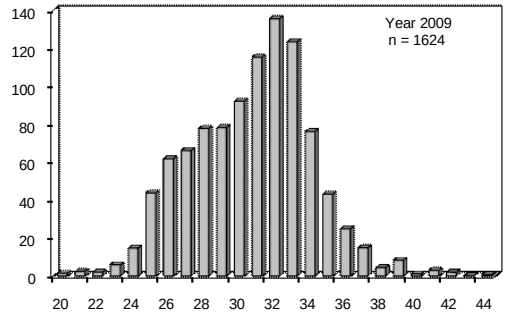

Fig. 6 - Annual length composition of Redfish (*S. mentella*) on Division 3M 130mm trawl fishery in 2009.

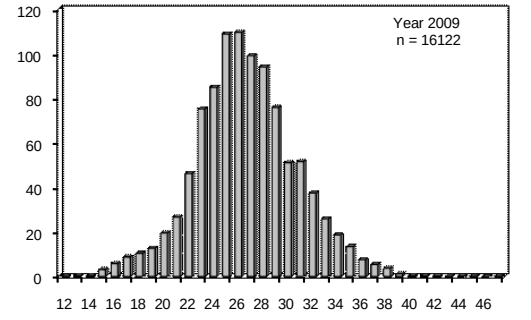

Fig. 7 - Annual length composition of Redfish (*S. mentella*) on Division 3N 130mm trawl fishery in 2009.

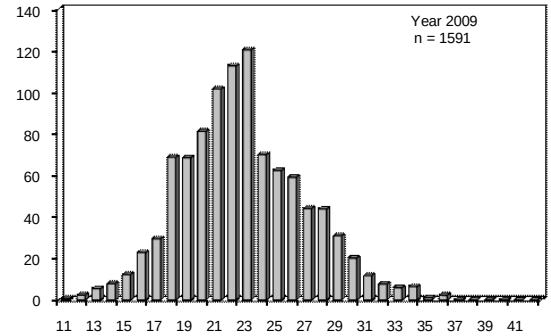

Fig. 8 - Annual length composition of Redfish (*S. mentella*) on Division 3O 130mm trawl fishery in 2009.

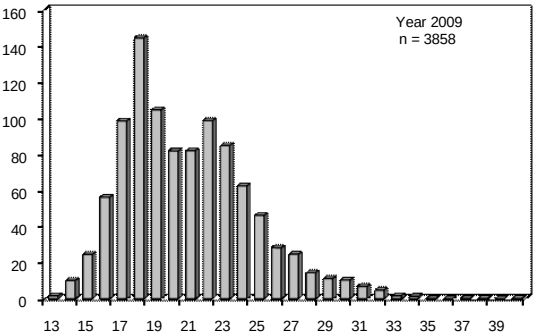

Fig. 9 - Annual length composition of Redfish (*S. marinus*) on Division 3M 130mm trawl fishery in 2009.

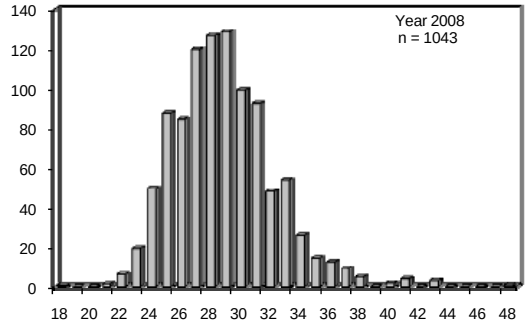

Fig. 10 - Annual length composition of American plaice on Division 3L 130mm trawl fishery in 2009.

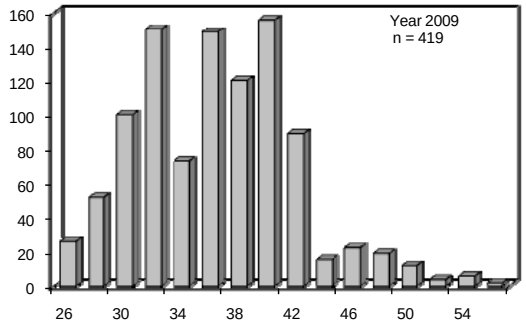

Fig. 11 - Annual length composition of American plaice on Division 3M 130mm trawl fishery in 2009.

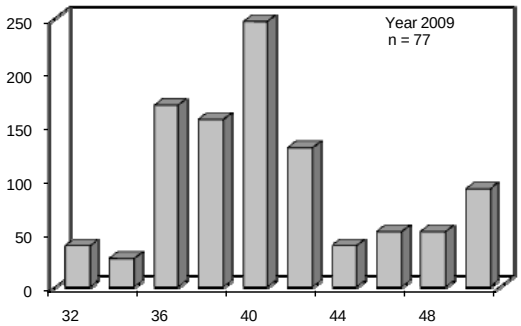

Fig. 12A - Annual length composition of American plaice on Division 3N 130mm trawl fishery in 2009.

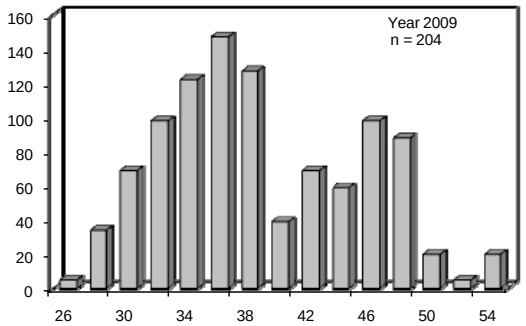

Fig. 12B - Annual length composition of American plaice on Division 3N 280mm trawl fishery in 2009.

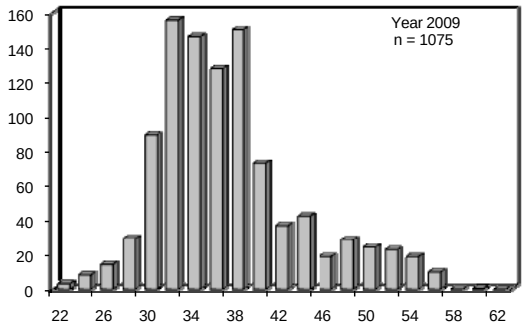

Fig. 13 - Annual length composition of American plaice on Division 3O 130mm trawl fishery in 2009.

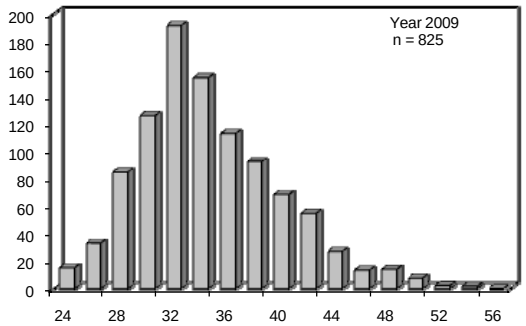

Fig. 14A - Annual length composition of Yellowtail flounder on Division 3N 130mm trawl fishery in 2009.

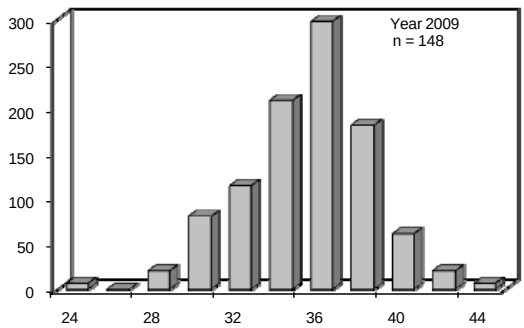

Fig. 14B - Annual length composition of Yellowtail flounder on Division 3N 280mm trawl fishery in 2009.

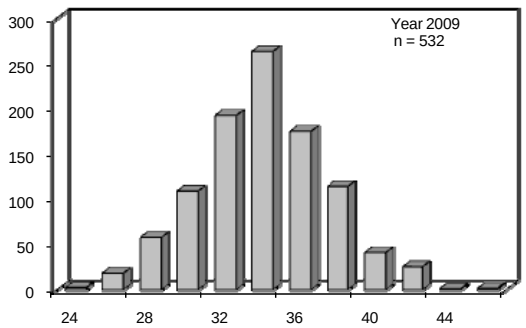

Fig. 15 - Annual length composition of Greenland halibut on Division 3L 130mm trawl fishery in 2009.

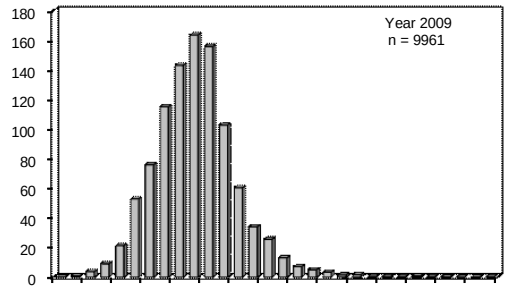

Fig. 16 - Annual length composition of Greenland halibut on Division 3M 130mm trawl fishery in 2009.

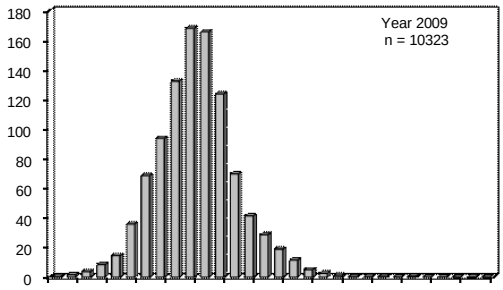

Fig. 17 - Annual length composition of Greenland halibut on Division 3N 130mm trawl fishery in 2009.

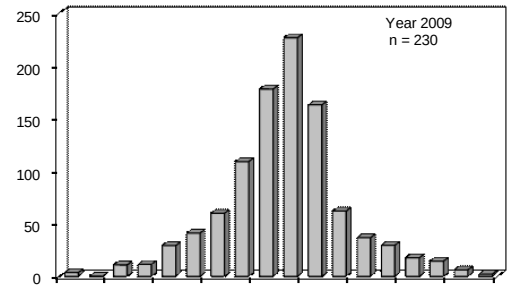

Fig. 18 - Annual length composition of Greenland halibut on Division 3O 130mm trawl fishery in 2009.

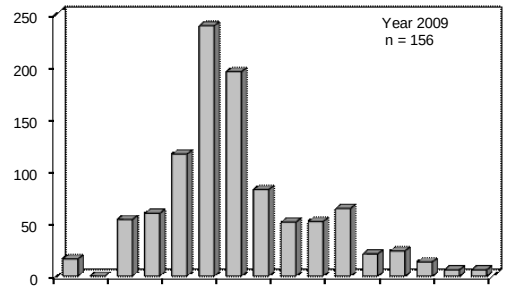

Fig. 19 - Annual length composition of Roughhead grenadier on Division 3L 130mm trawl fishery in 2009.

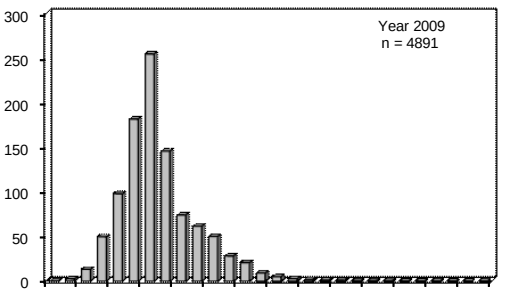

Fig. 20 - Annual length composition of Roughhead grenadier on Division 3M 130mm trawl fishery in 2009.

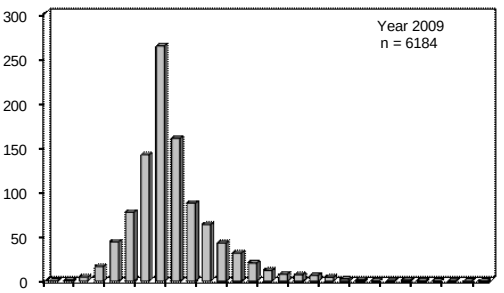

Fig. 21 - Annual length composition of Roughhead grenadier on Division 3N 130mm trawl fishery in 2009.

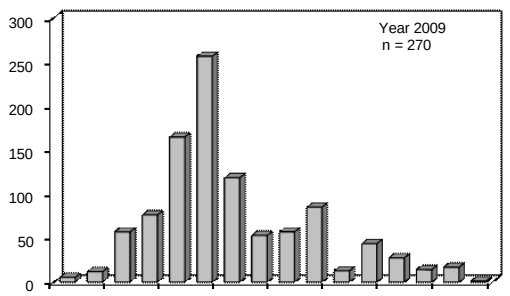

Fig. 22 - Annual length composition of Roughhead grenadier on Division 3O 130mm trawl fishery in 2009.

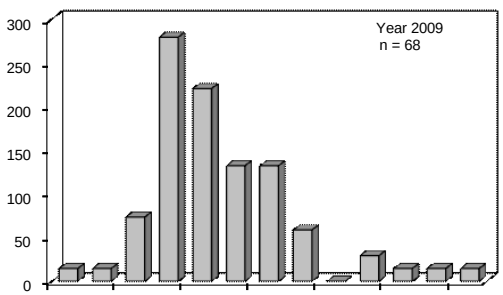

Fig. 23 - Annual length composition of Witch flounder on Division 3L 130mm trawl fishery in 2009.

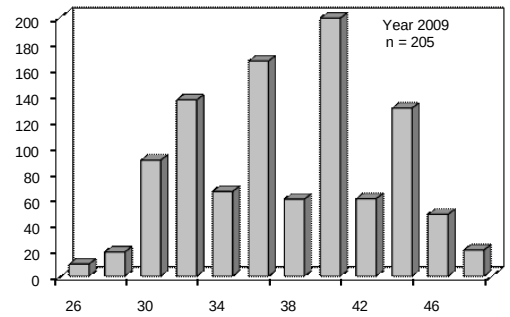

Fig. 24 - Annual length composition of Witch flounder on Division 3O 130mm trawl fishery in 2009.

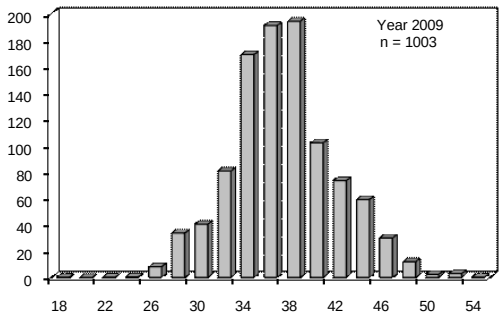

Fig. 25 - Annual length composition of Atlantic halibut on Division 3N 130mm trawl fishery in 2009.

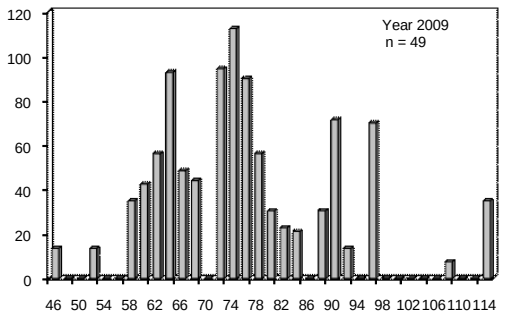

Fig. 26 - Annual length composition of Atlantic halibut on Division 3O 130mm trawl fishery in 2009.

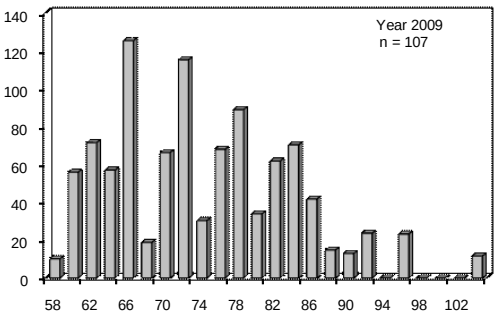

Fig. 27 - Annual length composition of Thorny skate on Division 3L 130mm trawl fishery in 2009.

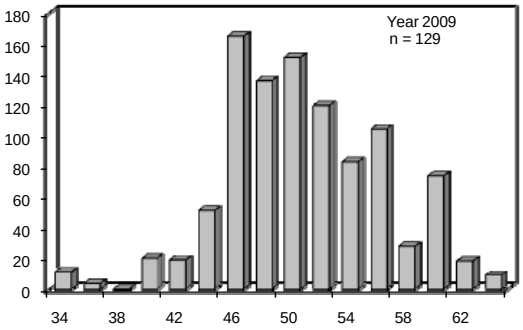

Fig. 28- Annual length composition of Thorny skate on Division 3M 130mm trawl fishery in 2009.

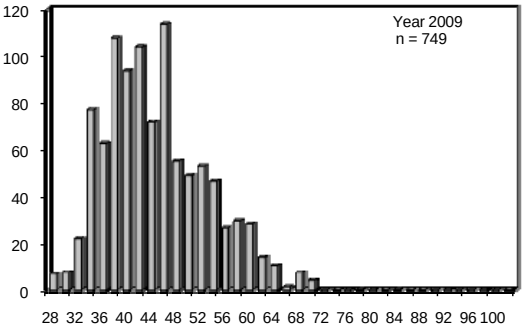

Fig. 29A - Annual length composition of Thorny skate on Division 3N 130mm trawl fishery in 2009.

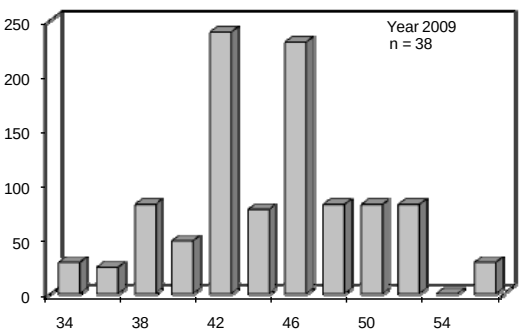

Fig. 29B - Annual length composition of Thorny skate on Division 3N 280mm trawl fishery in 2009.

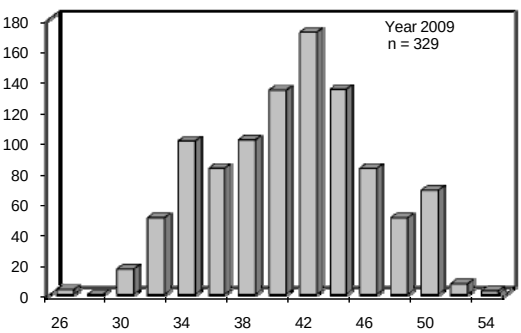

Fig. 30 - Annual length composition of Thorny skate on Division 3O 130mm trawl fishery in 2009.

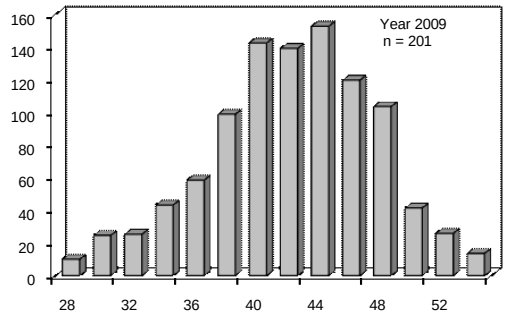

Fig. 31 - Annual length composition of Spinytail skate on Division 3L 130mm trawl fishery in 2009.

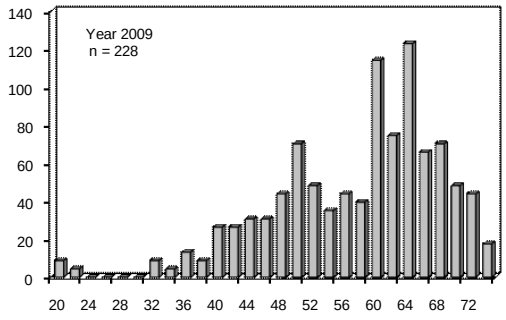

Fig. 32 - Annual length composition of Spinytail skate on Division 3M 130mm trawl fishery in 2009.

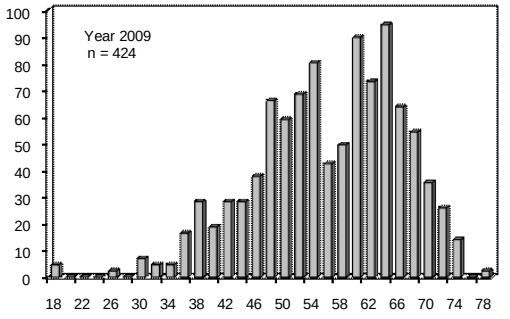

Fig. 33 - Annual length composition of Spinytail skate on Division 3N 130mm trawl fishery in 2009.

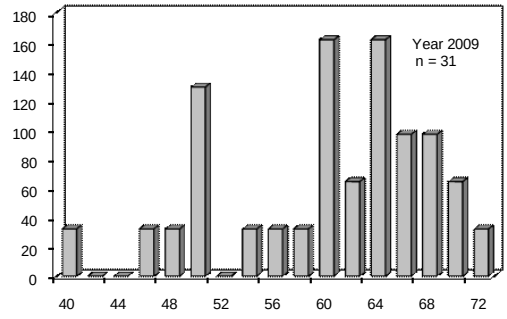

Fig. 34 - Annual length composition of White hake on Division 3O 130mm trawl fishery in 2009.

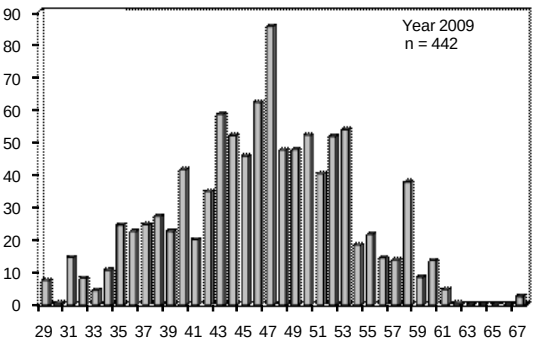

Fig. 35 - Annual length composition of Haddick on Division 3M 130mm trawl fishery in 2009.