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Portuguese Ressearch Report, 1983

by

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The present paper summarises the nominal catches that have been caught during 1983 by the Portuguese fleet in the NAFO area and the biological information collected on board of a commercial vessel.

A - Status of the fisheries

The Portuguese fleet conducted its fishing activities in Subareas 2, 3 and 4. The overall nominal catch was 16537 MT which represents an increase of 1895 MT. from 1982 to 1983 (TAB 1 and TAB 2).

1. Subarea 2

The Portuguese catches in this Subarea were taken in Divisions 2J in a total of 1389 MT. The main species caught were Atlantic Cod which represented 95.0% of the total, followed by Redfish with 4.3%

2. Subarea 3

In this Subarea the catches amounted to 13530 MT and were taken in Divisions 3K, 3L, 3M, 3N and 3O.

The main species remains the Atlantic Cod (68.8%) followed by the White Hake (15.6%) and the Redfish (13.9%) Flat fishes only represented 1.6% of the total caught.

3. Subarea 4

A total of 1618 MT were caught in this Subarea. Atlantic Cod represented 75% and Silver Hake 25%.

TAB. 1 Nominal catches by Subarea during 1982 and 1983

Subareas	1982		1983	
	MT	%	MT	%
2	1550	10.6	1399	8.4
3	13092	89.4	13570	81.8
4	-	-	1618	9.8
TOTAL	14642	100	16587	100

TAB. 2 Portuguese nominal catches MT of the main species, by Division, during 1982 and 1983.

Species	Year	2H	2J	3K	3L	3M	3N	3O	4Vs	4W
Cod	1982	367	1110	598	3964	3316	641	458	-	-
	1983	-	1320	751	4521	2930	448	660	1207	23
Redfish	1982	-	64	322	125	1408	-	5	-	-
	1983	-	60	123	91	1667	-	-	10	-
White Hake	1982	-	-	-	-	-	267	906	-	-
	1983	-	-	-	-	-	271	1885	-	-
Silver Hake	1982	-	-	-	-	-	-	-	-	-
	1983	-	-	-	-	-	-	-	-	378
Others	1982	-	9	35	358	-	345	344	-	-
	1983	-	19	12	3	208	-	-	-	-
TOTAL	1982	367	1183	955	4447	4724	1253	1713	-	-
	1983	-	1399	886	4615	4805	719	2545	1217	401

B - Special Research studies

1. Environmental studies

No environmental studies were carried out on these subjects.

2. Biological studies

Biological studies on cod were carried out on board of a commercial otter trawl in Divisions 3M, 3N and 3L from February to June in order to obtain information about length, weight and age composition of the catches.

Atlantic Cod, Redfish and Silver Hake were sampled as follows:

SPECIES	DIVISION	MONTH	Nº	FISH	FISH
			SAMPLES	MEASURED	AGED
Atlantic Cod	3M	March	4	224	190
	3N	March	2	112	106
		April	1	52	49
	3L	March	2	102	100
Redfish	3M	Feb	2	79	-
		March	3	224	-
	3N	March	5	365	-
		June	1	48	-
	3L	Feb	4	258	-
		March	2	140	-
		April	7	429	-
Silver Hake	4W	May	3	214	-

2.1 Atlantic Cod

Division 3M

The lengths frequency analyse indicated the presence of a main mode at 45-48 cm (Lf) corresponding to the 1980 year class.

This year class was dominante (574<sup>o</sup>/oo) with a mean length of 43.9, followed by the 1979 one (Table bellow).

Age composition (Per mile)

Age	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
°/oo	17	524	271	15	83	31	-	8	37	-	4
Mean length Lf (Cm)	25.9	44.4	50.0	61.8	68.6	79.0	-	91.0	102.4	-	121.0

Division 3N

Although the number of fishes measured was limited, the length frequency analysis indicated the presence of a main mode at 51-54 cm in both months sampled, with the 1978 year class dominante (Table bellow).

Age composition (Per mile)

Age	III	IV	V	VI	VII	VIII	IX	X	XI	XII
MARCH %/oo	18	54	561	54	48	183	37	-	9	18
Mean length	40.0	46.5	52.9	65.4	77.7	87.3	93.1	-	94.0	104.5
APRIL %/oo	39	39	632	194	39	38	19			
Mean length	41.5	44.5	54.2	62.4	68.5	86.5	88.0			

Division 3L

Length frequency analysis indicated the presence of a main mode at 54 cm length class with the 1978 year class dominante (Table bellow).

Age composition (Per mile)

Age	III	IV	V	VI	VII	VIII	IX	X	XI
%/oo	44	201	509	74	39	79	35	-	19
Mean length	36.4	48.9	55.2	67.2	69.7	78.8	87.8	-	97.3

2.2 Redfish

Length frequency analysis indicated for Division 3L, the presence of a main mode close to 31 cm in each one of the month sampled. In Division 3N the main mode corresponds to 25cm for March and 30 cm for June.

In Division 3M the main mode is at 29 cm for February and 30 cm for March.

No age readings were done.

2.3 Silver Hake

Length frequency analysis indicated a main mode at 32 cm for May. In June the main mode is close to 30 but only 67 individuals were sampled.

No age readings were done.