

Northwest Atlantic



Fisheries Organization

Serial No. N1167

NAFO SCR Doc. 86/50

SCIENTIFIC COUNCIL MEETING - JUNE 1986

An Update on the Status of the Cod Stock in Division 3M

by

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Nominal catch

The nominal catches for this stock have been about 10,000 t since 1980 when TAC's were considerably higher. Large portions of the catches since that time have been taken by vessels from: Spain, Faroe Islands, Norway, Portugal, and USSR. The nominal catch for 1985, given in Table 1 by country and month as obtained from NAFO circular letters, has been about the same as the recent average.

The commercial fishery

As in the past, only limited sampling information was available for the calculation of catch at age. These included 164 ages and 4212 length measurements from Portuguese based vessels and 38 ages and 2171 length measurements from Faroese based vessels. The 1985 catch and average weight at age are presented in Table 2. Again, only the 1980 and 1981 year-classes, which comprised about 90% in numbers, appeared to be of any consequence in the 1985 catch.

Research vessel surveys

Research vessel surveys have been conducted on the Flemish Cap by the GADUS ATLANTICA for the period 1978-85 and a survey of limited coverage was conducted in 1977 by the A. T. CAMERON. There was no Canadian survey in 1986. The results from these surveys were presented last year (Wells and Baird, 1985) and are not given here. At the time of last years meeting only a sample of the research ages collected during the 1985 survey had been read.

Table 3 gives the average catch per tow at age for all fish aged from the 1985 survey. As in the commercial catch, the dominant year-class in the survey was that of 1981, with the 1982 year-class showing some promise.

REFERENCE

Wells, R. and J. W. Baird. 1985. Age compositions of cod in longline samples in 1984 and in abundance estimates from a research vessel survey in 1985 on the Flemish Cap. NAFO SCR Doc. 85/65, Ser. No. N1017, 6 p.

Table 1. Nominal catch for the cod stock in Division 3M by country and month for 1985.

Month	Port	Spain	EEC	DenF	Nor.	USSR	Cuba	Japan	Total
Jan.	756	55				1			812
Feb.	819	267	237	205		9			1537
Mar.	353	295		240		7			895
Apr.		1171	52	230		2			1455
May	13	625	22	375		107		1	1143
June	132	220		255					607
July		217		140		3			360
Aug.		289			27	115	9		440
Sept.		154			154	27			335
Oct.		351			160	308			819
Nov.		892				163		1	1056
Dec.		314						3	317
	2073	4850	311	1445	341	742	9	5	9776

Table 2. Catch and average weight at age from the commercial fishery on the Flemish Cap during 1985.

Age	Average		Mean	Catch	
	Weight	Length		Std. err.	C.V.
3	0.460	37.520	9	4.74	0.56
4	1.866	58.947	2229	64.36	0.03
5	3.695	73.969	966	67.69	0.07
6	3.660	73.779	59	33.66	0.57
7	6.588	89.246	90	17.30	0.19
8	6.878	90.779	70	11.92	0.17
9	3.466	71.217	38	23.20	0.62
10	8.180	95.660	10	4.45	0.43
11	9.664	101.345	7	2.76	0.40
12	9.956	101.712	21	5.03	0.24
13	12.555	110.416	1	0.56	0.81
14	-	-	-	-	-
15	17.934	124.000	-	-	0.01

Table 3. Mean number of cod per tow and abundance at age from the 1985 research vessel survey on the Flemish Cap.

Age	Mean no. per tow	Total numbers (x10 ⁻³)
1	0.05	39
2	0.66	520
3	7.84	6,214
4	25.19	19,955
5	0.98	774
6	0.06	50
7	0.13	105
8	0.11	87
9	0.01	6
10	0.02	12
11	0.03	25
12	0.04	31
13	0.02	12
14	0.01	6
Total	35.13	27,837
Upper	44.31	35,104
Lower	25.96	20,568