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The Faroese Longline Fishery for Cod on Flemish Cap 1973-88

Data on Catch and Effort from Three Longliners

by

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INTRODUCTION

Faroese longliners have been fishing on Flemish Cap since the early sixties. At that time almost only Faroese vessels did perform a fishery on these grounds; in the late seventies and in the beginning of the eighties the Faroese catches made up about 25 % of the total catches in this area but dropped down in the last years before the moratorium to about 10-15 % of the total catches. A number of different vessels have participated in the fishery, but the specialists on fishery on Flemish Cap in the Faroese fishing fleet are longliners with home port in Klaksvík. These boats have sheltered working decks and are about 400 GRT. Usually they perform 2 trips a year, starting fishery in January/February.

They make usually one set a day, each time using about 24 000 hooks. The total length of the long line is about 24 miles on average. Sometimes the line is set in smaller pieces, depending on f.ex. weather, depth and bottom. From 1987 two of the vessels have installed automatic baiting systems, and the effort has increased up to about 36 000 hooks a day; however, the distance between the hooks has decreased.

The product is wet salted cod, usually landed in the home town Klaksvík at the Faroes.

The fish is processed to fresh fillets on deck, then lowered down to the hold in boxes for salting. Each filled box corresponds to one shippound landed saltfish (1000 kg = 6 boxes) The number of boxes per day is written down in the ship journal, and this is the basis for calculating the catch in weight (kg round weight).

In this document data on catch and effort from 3 of the above mentioned specialists are presented for the years 1973-88 in order to provide some additional information on the status of the cod stock in NAFO area 3M in this period.

RESULTS AND DISCUSSION

Data on catch and effort 1973-88 for each of the 3 longliners are presented in Tables 1-3. In Table 4 these data have been combined to give "mean" catch figures (kg) per day (CPDAY) and "mean" CPUE (kg/1000 hooks) for each year. The CPDAY-values have been calculated in addition to the "traditional" CPUE-values, as there have been some doubts about using CPUE from long line fisheries to reflect changes in stock abundance. The results are shown in Figs. 1 and 2.

The CPDAY-figures for 1973-85 have varied between 5 and 9 tons, but dropped down to 3-4 tons in 1986-88. The CPUE-values seems to indicate the same tendency with values between 200 and 400 kg up to 1985 falling down below 100 kg in 1986 and 1987.

The very high values for CPDAY in 1984 is because of very high reported catches by one of the vessels in September that year, and the extraordinarily high value for CPUE in 1983 is reflecting exceptionally high reported catches by the same vessel in the beginning of May that year (Table 3). The stippled line in Figs. 1 and 2 shows the situation, when the catches by this vessel have been left out of the analysis.

Both series seem to indicate a reduction in stock abundance in later years, especially after 1985, which is in good agreement with the general feeling about this stock. The Faroese long line fishery on Flemish Cap could therefore be an useful indicator of stock abundance in the present situation with no analytical assessment of the cod stock.

Table 1. M/s "Bordoyarnes" KG 183 on Flemish Cap
Catch and effort data 1973-1987

Year	Fishing-	Effort	Catch (kg)	C. per day	CPUE
	Days	No. of hooks	Round w.	Round w. (kg)	Kg/1000 hooks
1973	131	3515100	907674	6929	258
1974	82	2196940	569999	6951	259
1975	154	4155000	764653	4965	184
1976	220	5492800	1517207	6896	276
1977	118	2468600	1101162	9332	446
1978	179	4411680	1456514	8137	330
1979	93	2446800	818138	8797	334
1980	155	3842000	1029303	6641	268
1981	105	2940000	840931	8009	286
1982	70	2352000	257907	3684	110
1983	64	2073520	385117	6017	186
1984	175	5805600	1159537	6626	200
1985	121	3845280	717208	5927	187
1986	119	4615000	488140	4102	106
1987	171	4213320	432093	2527	103
1988					
1989					
1990					

Table 2. M/s "Hans Erik" KG 516 on Flemish Cap
Catch and effort data 1973-1987

Year	Fishing-	Effort	Catch (kg)	C. per day	CPUE
	Days	No. of hooks	Round w.	Round w. (kg)	Kg/1000 hooks
1973	171	4638000	975675	5706	210
1974	22	660000	137535	6252	208
1975	123	3046200	698511	5679	229
1976	104	2545600	935814	8998	368
1977	179	4081000	1621164	9057	397
1978	165	3349000	1116046	6764	333
1979	88	2002000	554884	6306	277
1980	123	2510000	626354	5092	250
1981	40	962000	293394	7335	305
1982	16	320000	107675	6730	336
1983	102	2075000	593025	5814	286
1984					
1985	61	1666000	372326	6104	223
1986	176	4553000	644186	3660	141
1987	56	2070000	154418	2757	75
1988					
1989					
1990					

Table 3. M/S "Sigurfari" KG 21 on Flemish Cap
Catch and effort data 1973-1988

Year	Fishing-	Effort	Catch (kg)	C. per day	CPUE
	Days	No. of hooks	Round w.	Round w. (kg)	Kg/1000 hooks
1973	179	4092700	1359814	7597	332
1974	44	1089000	323024	7341	297
1975	135	3344900	749114	5549	224
1976	187	4220100	1065116	5696	252
1977	178	4261900	1564885	8791	367
1978	79	1891100	637208	8066	337
1979	102	2578400	836279	8199	324
1980	115	2838900	670308	5829	236
1981	139	3600000	815537	5867	227
1982	7	186600	21326	3047	114
1983	66	225200	280189	4245	1244
1984	111	2977200	1248604	11249	419
1985	179	4547000	1104512	6170	243
1986					
1987					
1988	108	3389850	399070	3695	118
1989					
1990					

Table 4. Faroese long line fishery on Flemish Cap 1973-1988
Combined catch and effort data for 3 longliners

Year	Catch per day (kg round weight)				CPUE (kg round weight p. 1000 hooks)			
	Bord.nes	HansErik	Sigurfari	Mean	Bord.nes	HansErik	Sigurfari	Mean
1973	6929	5706	7597	6744	258	210	332	267
1974	6951	6252	7341	6848	259	208	297	255
1975	4965	5679	5549	5398	184	229	224	212
1976	6896	8998	5696	7197	276	368	252	299
1977	9332	9057	8791	9060	446	397	367	403
1978	8137	6764	8066	7656	330	333	337	333
1979	8797	6306	8199	7767	334	277	324	312
1980	6641	5092	5829	5854	268	250	236	251
1981	8009	7335	5867	7070	286	305	227	273
1982	3684	6730	3047	4487	110	336	114	187
1983	6017	5814	4245	5359	186	286	1244	572
1984	6626		11249	8938	200		419	206
1985	5927	6104	6170	6067	187	223	243	218
1986	4102	3660		3881	106	141		124
1987	2527	2757		2642	103	75		89
1988			3695	3695			118	118
1989				0				0
1990				0				0

Faroese long line fishery Flem. Cap Catch per day 1973-88 (Kg round w.)

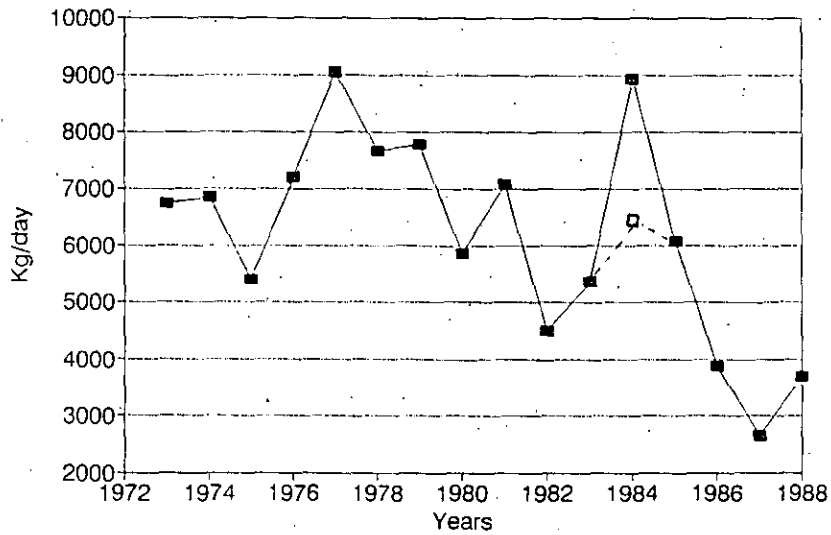


Fig. 1.

Faroese long line fishery Flem. Cap CPUE 1973-88 (Kg round w.p. 1000 hooks)

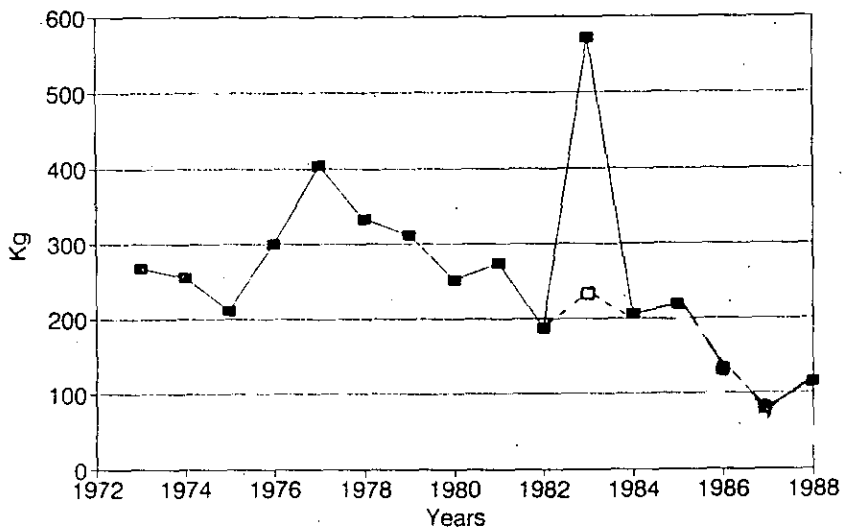


Fig. 2.