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The Norwegian Fishery for Shrimp, Pandalus borealis,
off West Greenland in 1981

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INTRODUCTION

The Norwegian quota of shrimp off West Greenland decreased from 2500 tons in 1980 to 1000 tons in 1981. Landings in 1980 were 2502 tons. In 1981, 15 vessels have taken part in the fishery and preliminary reported landings are 1054 tons.

Results of field investigations together with analyses of preliminary catch and effort data for 1980 were reported by Jakobsen and Torheim (1980). The catch and effort data for 1980 have been updated and the complete data are presented in this paper (Table 1 and 2).

The intention of the Institute of Marine Research was, as in previous years, to send an observer on board a Norwegian trawler fishing in West Greenland waters. However, the observer was prevented from joining a trawler at West Greenland because of a long-lasting strike at the airports in Greenland. Field investigations in West Greenland waters could therefore not be carried out in 1981.

MATERIAL AND METHODS

Norwegian data on shrimp from West Greenland waters in 1981 comprise only monthly catch and effort data compiled from logbooks of vessels participating in the fishery. Preliminary data were available from 9 vessels, accounting for 55 per cent of the landings.

CATCH AND CATCH PER UNIT OF EFFORT

Table 1 shows the complete data for catch and catch per hour trawling (CPUE) by month and division for the Norwegian shrimp fishery off West Greenland in 1980 and preliminary data for 1981.

In absence of logbooks from two trips in 1980, totalling 195 tons of shrimp, the catches have been distributed between months on the basis of weekly catch reports as follows:

	Jan	Feb	-----	Jul	Aug	Sep	Total
Tons	52	67		27	38	11	195

These figures are included in the catch from Div. IB in 1980 (Table 1), but are not used in the calculations of CPUE.

The annual mean CPUE (Table 2) in Div. IB and IC in 1980 was lower than in earlier years, whereas in Div. ID the CPUE was at an average level.

In 1981, CPUE is slightly lower than in 1980 in Div. IB and Div. IC. In Div. ID the CPUE is only about half the 1980 level. However, the quota reduction from 2500 tons to 1000 tons for the Norwegian fishery in 1981 have given a considerably poorer Norwegian data base for estimating trends in CPUE. Furthermore, because of the reduced quota, only the smaller shrimp trawlers have been allowed by Norwegian authorities to fish at West Greenland. These vessels are likely to be less effective than the larger trawlers previously participating in the fishery. Comparison of CPUE in 1981 with earlier years may therefore be subject to some bias. The CPUE by quarters in 1981 shows a sharp decline from the 1st to the 2nd quarter, but increases somewhat again in the 3rd quarter (Fig. 1).

Table 1. Catch (metric tons) and catch per hour trawling (CPUE) by month and division in 1980 and 1981. (CPUE is calculated as total catch/total effort).

Year Month	IB		IC		ID		IE		IF		Total catch
	Catch	CPUE	Catch	CPUE	Catch	CPUE	Catch	CPUE	Catch	CPUE	
1980 Jan	320	0.188									321
Feb	343	0.164	21	0.201	1	0.083					398
Mar	94	0.132	11	0.115	29	0.105			5	0.278	111
Apr	138	0.164	17	0.153	6	0.075					160
May	230	0.195	21	0.148	3	0.083	2	0.154			270
Jun	111	0.171			19	0.181					571
Jul	409	0.238			460	0.312					501
Aug	159	0.251			92	0.175					159
Sep	11										11
Total	1815	0.189	70	0.155	610	0.242	2	0.154	5	0.278	2502
1981 Mar	50	0.424			3	0.158					53
Jun	49	0.125									49
Jul	368	0.163	23	0.133	15	0.133					406
Aug	45	0.317			23	0.120					68
Total	512	0.176	23	0.133	41	0.127					576

Table 2. Mean catch per hour trawling (metric tons) for shrimp off West Greenland by Norwegian vessels 1975 to 1981.

Year	0A	1A	1B	1C	1D
1975	-	-	0.510	0.225	0.242
1976	-	-	0.452	0.323	0.239
1977	0.216	-	0.409	0.229	0.275
1978	-	0.369	0.220	0.162	0.161
1979	0.249	-	0.223	0.211	0.262
1980	-	-	0.189	0.155	0.242
1981	-	-	0.176	0.133	0.127

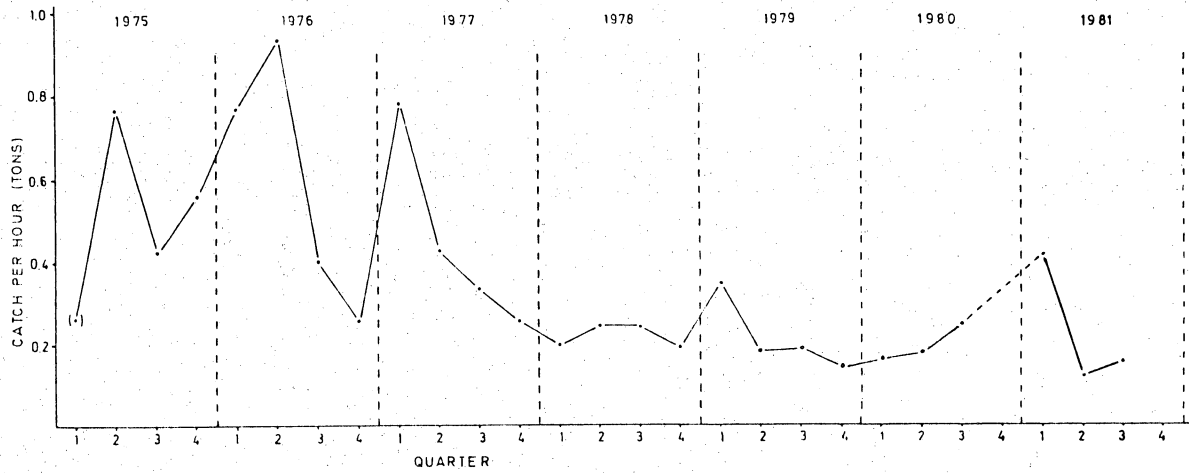


Fig. 1. Quarterly mean shrimp catch per hour trawling by Norwegian vessels in Div. 1B 1975-1981.