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the Northwest Atlantic Fisheries

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Norwegian Research Report, 1974

Section I. Subareas 1, 2, 3 and 4

by

Ø. Ulltang,

Institute of Marine Research, Bergen, Norway

Nominal catches in 1974 by species and areas are given in Table 1. Total Norwegian catches decreased from 66076 tons in 1973 to 57599 tons in 1974 due to a decrease in fishing effort in the cod fisheries. Total cod catches decreased from 24174 tons in 1973 to 8345 tons in 1974.

Subarea 1

A. Status of the Fisheries

<u>Cod.</u> The catches of cod decreased from 15205 tons in 1973 to 3706 tons in 1974. In 1973 9681 tons were taken by trawlers whereas only one trawler fished for cod in the area in 1974. Most of the catches were taken by longliners in the period February - May and by drift net vessels and longliners in the period September - November.

<u>Deep Sea Prawn</u> The fishery for deep sea prawn in Subarea 1 expanded further in 1974. 20 trawlers operated in the area. This is about twice the number fishing in 1973, and the catch increased from 2940 tons in 1973 to 5600 tons in 1974.

B. Special research studies.

Investigations on capelin and sand eel were carried out during a cruise with M/S "Havdrøn" in June-July, covering the banks and a few selected fjords at West Greenland.

The capelin had recently spawned when the survey started, and during the first part of the cruise, apart from some small concentrations on Fyllasbank, capelin were found only in inshore areas and fjords. Later a migration to the bankstook place, and during the last part of the cruise capelin were found on all the southern banks. Samples of the capelin indicated that only the largest immature 2 and 3 years old capelin and capelin surviving

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the spawning had so far migrated to the banks in July. While most of the stock was found in inshore areas, no attempt was made to estimate the stock size of capelin at West Greenland. It is, however, tentatively concluded that the stock size is only 5 - 10 % of the capelin stock in the Barents Sea.

Shoals of sand eels were recorded on all banks surveyed at West Greenland. The catches mostly consisted of old fish, 6 years and older. Spawning had only commenced on the southernmost banks. For further details, see Res. Doc. 75/53.

Subarea 2

A. Status of the Fisheries

<u>Cod.</u> As in 1973 no catches were taken in stock area 2GH. In Division 2J a catch of 571 tons was taken by longliners in the period March - June.

Subarea 3

A. Status of the Fisheries

<u>Cod.</u> Catches decreased from 7739 tons in 1973 to 2961 tons in 1974. In 1973 4190 tons were taken by trawlers whereas all catches in 1974 were taken by longliners. The main catches were taken in Div. 3K in April-June and in Div. 3Ps in August-November.

<u>Capelin.</u> The fishery for capelin on the Grand Banks, Newfoundland, continued in 1974. As in 1973 the fishery was conducted by a factory ship and a number of trawlers. Most of the catches were taken during the spawning season in June and July on Southeast Shoal. The fishing was stopped 14 July due to the quota regulations. The total catch was 43405 tons.

B. Special research studies

<u>Capelin.</u> The catches of capelin were sampled for age-, length-, and sexcomposition and maturity stages. Most of the capelin were mature and 3-5 years old. For further details, see Res. Doc. 74/3.

Subarea 4

A. Status of the Fisheries

<u>Cod.</u> A total catch of 1107 tons was taken by longliners in 4T, 4Vn and 4Vs. Most of the catches were taken in 4T and 4Vs in September-November.

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Subarea	Cod	Greenland	Redfish	Capelin	Deep Sea	Total	
and Division		halibut			prawn		
SAO		21				21	
SA≇	3706	17	109		5600	9432	ľ
2 G		87	9			93	
2 H							
2 J	571	2				573	- 3
SA 2, Total	571	89	6			666	-
3 K	1130	7				1137	
3 Г	52			25.01		2553	
3 N				40904		40904	
3 M	466					466	
3 P _{,8}	1313					1313	
SA 3, Total	2961	2		43405		46373	
4 T	567					567	
4 V.p.	100					100	
4 V g	440					440	
SA 4, Total	1107					1107	
Total	8345	134	115	43405	5600	57599	

Nominal catch in metric tons, 1974 (provisional figures)

Table l.

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Section II. Seals

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Torger Øritsland

Institute of Marine Research, Bergen-Norway

A. Status of the fisheries

Provisional catch and effort data for Norwegian sealing on the Front (Subareas 2 and 3) were reported in ICNAF Summ.Doc. 74/45. Revised data have been submitted to the ICNAF Secretariat for inclusion in a Summary Document to the 1975 Annual Meeting.

Participation decreased from 10 ships with 180 men in 1973 to 8 ships with 146 men in 1974. These 8 ships caught 55585 harp seals from the allocated Norwegian quota of 60 000, and 9796 hooded seals from the unallocated total quota of 15 000.

B. Special research studies

Field work on harp and hooded seals was continued by a representative of the Institute of Marine Research on board a commercial sealer on the Front from 11 March to 21 April. Ice edges and the distribution of seals were plotted through the season. An optional tagging program could not be carried out. <u>Harp seals</u>. An age sample with information on date and sex was collected from 1232 moulting seals (64,4 % males). The data are being analysed for consideration by the Scientific Advisers to Panel A in June 1975. Provisional analyses of harp seal age samples collected in the 1971-1974 seasons indicate that pup production in the mid 1960-ies was about 400 thousand per year. This suggests that also production in 1971 was higher than assumed when the TAC for harp seals at Newfoundland was estimated at the Special Meeting of Panel A Experts in September 1971.

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Four harp seals tagged as pups on the Front in 1971 and 1972 were recaptured during the season . A harp seal tagged on the Front in 1972 was recaptured in West Greenland in June.

Long-term studies of changes in the age-and sex-composition in the moulting lairs and of the growth and development of lactating and weaned pups were continued.

<u>Hooded seals</u>. An age sample of breeding seals was collected from 879 hoods on the Front (34,5% males), and an additional sample of 101 hoods was collected by one of the sealing inspectors. The samples have been processed and are being analysed together with the 1973 sample of 388 hoods (42,3% males) for consideration at June Meeting.

A long-term study of pup growth was continued. Frequencies of weaned pups were recorded by counting a total of 1535 pups from 21 March to 2 April. The frequencies indicate that 50% of the pups were weaned on 25 March. Observations suggest that 50% of the births had occurred before 16 March, and therefore also that hooded seals at Newfoundland on the average lactate only 9 days.

An age sample comprising 1200 moulting hooded seals (58,9% males) was collected in the Denmark Strait in June-July. The data are being analysed together with data from earlier samples for publication within this year. The total material collected from 1955

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to 1974 number nearly 13 thousand moulting hoods. Provisional results indicate that the average total mortality of subadult and adult hoods decreased from about 0.27 before 1960 to about 0.20 in recent samples. This may be a direct result of the protection of moulting hoods in the Denmark Strait from 1961.

A total of 101 subadult and adult hooded seals were tagged in the Denmark Strait i 1974 (tag numbers D0001-D0101) .