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STATUS OF FISHERIES AND RESEARCH

CARRIED OUT IN SUBAREA 2 IN 1968

by

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Research reports were submitted by the following countries; Canada, Germany, Poland, Portugal, Spain, USSR and U.K.

Data on fisheries and research are shown in the following ICNAF papers: C.D. 69/1; R.D. 69/7; R.D. 69/10; R.D. 69/12; R.D. 69/13; R.D. 69/14; R.D. 69/16; R.D. 69/17; R.D. 69/18; R.D. 69/21; R.D. 69/22; R.D. 69/23; R.D. 69/34; R.D. 69/39; R.D. 69/58; R.D. 69/61; R.D. 69/62; R.D. 69/84.

1. Status of the Fisheries

The total catch in Subarea 2 in 1968 considerably increased and made up 426,300 tons /excluding non-member countries/. In 1967 the total catch was 328,400 tons.

The table below shows the catch in Subarea 2 by countries for the last six years:

Subarea 2 /thous. tons/

	1963	1964	1965	1966	1967	1968
Can./M/	-	-	-	∅	∅	0.2
" /N/	25.0	16.5	26.8	24.4	28.5	18.9
Den./F/	-	0.3	-	-	-	-
FR /M/	40.3	36.7	26.1	31.2	24.7	38.8
" /SP/	-	-	-	-	-	0.1
FRG	2.0	9.4	44.0	67.8	33.6	55.2
ICE	-	0.5	0.6	0.4	0.1	-
NOR	-	-	0.8	0.9	2.0	16.0
POL	2.4	6.9	22.9	31.9	43.0	73.6
POR	73.3	41.1	72.8	46.3	53.3	60.3
SPA	54.8	45.4	59.5	48.6	37.0	32.9
USSR	25.1	69.3	67.0	37.2	31.3	118.6
UK	0.6	1.7	10.9	11.0	9.1	11.7
Non-m.	∅	23.2	45.8	65.9	65.8	

1968 catches are provisional and do not include catches by non-number countries.

An increase in the catch taken in Subarea 2 was mainly due to larger catches of cod made by trawlers of the USSR, Poland, FRG, France and Norway. Catches by Canada and Spain went down.

Catches per trawling hour taken by the Soviet and Polish trawlers for the last three years were as follows /in tons/:

	<u>1966</u>	<u>1967</u>	<u>1968</u>
Poland	2.65	2.45	3.27
USSR	3.05	2.05	3.42

Catches taken by FRG trawlers in 1968 were also very large; they reached 35.7 tons per day.

These data indicate good abundance of cod stocks in Subarea 2 in 1968.

## 2. Research Work Carried Out

a/ Canada: As part of the study of the North Atlantic Deep Water by the Atlantic Oceanographic Laboratory, an atlas has been prepared of oceanographic sections occupied in 1965-67. This includes temperature salinity, dissolved oxygen and silica for Davis Strait Labrador Basin, Denmark Strait, and Newfoundland Basin.

Cod samples were taken from inshore catches to determine the length, age, sex, sexual maturity, and food.

On an A.T. Cameron cruise to the northern Labrador Shelf, 21 salmon were taken in 5 overnight drift net sets between 29 March and 5 April. About 1800 m. of nets were used for each set, with the gear fished at the surface over depths of 2400-3500 m. outside the seaward edge of the ice.

b/ Federal Republic of Germany: From February till mid-April very good conditions for cod trawl fishery in Labrador were observed. The fishery was mainly conducted in Division 2J.

Catches of cod taken in this Division in 1968 were the largest for the whole time of the fishery /since 1958/ despite the high fishing intensity as compared to previous years.

Catch of cod per fishing day in 1968 was 35.7 tons. In the past the highest catch per fishing day was in 1965, the catch then was 31.4 tons.

Redfish was caught in very small quantities /the total catch was 301 tons; 0.2 ton per fishing day/.

R/V Walther Herwig carried out hydrographical and biological surveys on cod concentrations in Division 2J early in 1969.

c/ Poland: Collection of cod samples was undertaken on board fishing vessels and R/V Wieczno for determination of the length - age composition of catches. Cod from 42 cm. to 65 cm. long at ages of 5 to 10 years were predominant in catches. These data indicate an abundant cod stock in 1968 in Subarea 2. The 1965 year-class was very abundant.

Data on the length composition of redfish /Mentella/ were also collected on board the trawler Aries. Males were 24 to 45 cm. long /mean - 32.8/; females - 25 to 50 cm long /mean - 36.3/.

Length measurements of American plaice were made in Division 2J. Fish of 25 to 36 cm. length at ages VI-IX were predominant.

d/ Portugal: Samples from cod catches were collected in Division 2J for determination of the length, age and state of sexual maturity. In February 1968 the length of cod in catches

was from 31 to 85 cm. /mean - 51.5 cm/. The predominant age was VI.

In February 1968 about 60% of females were in resting or recovering stages and about 40% were in the developing stage; males 20% and 60% respectively and also about 20% in the spawning stage.

e/ USSR: R/V Neptun carried out the hydrological section over Hamilton Inlet Bank. The water temperature in the upper layers /except surface/ in 1968 was lower than the long term mean. One should expect the water temperature in 1969 to be lower than average.

A study of the length and age composition of cod in the catches was conducted.

Specimens of 1961, 1962 and 1963 year-classes were predominant in catches in 1968. These year-classes were rather numerous.

At present cod at the age of 5 to 8 years predominates in catches.

Determination of the length composition of Macrurus catches showed that the specimens caught were 22 to 97 cm /mean - 70 cm/.

### 3. Hydrography

The Soviet R/V Rossia and scouting BMRT Neptun conducted oceanographic surveys in ICNAF Subareas 1, 2 and 3. In November 1968 the temperature of cold waters of the Labrador Current at depths more than 50 meters was lower than the mean long term temperature of these waters by  $0.50^{\circ}$  -  $0.97^{\circ}$ . The surface water temperature was higher by  $0.60^{\circ}$ . Preliminary data obtained in

February 1969 aboard the trawler Volgograd also indicate a decrease in the temperature of waters of the cold Labrador Current.

4. Plankton

The survey with Continuous Plankton Recorders, operated from the U.K. Oceanographic Laboratory, Edinburgh, was continued in 1968 on the same basis as previous years in the ICNAF area.

During 1968, there were 3,460 miles of sampling in Subarea 2.