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Status of Fisheries and Research carried out in Subarea 2 in 1967

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Research Reports were submitted by the following countries:
Canada, France, FRG, Iceland, Poland, Portugal, Spain, USSR and U.K.

The paper compiled by J.A. Gulland (FAO) "Area reviews on living resources of the world's ocean: Northwest Atlantic" was also submitted as well as the provisional catch statistics for 1967 prepared by the Secretariat of ICNAF (Res.Doc.68/18 and Supplement 28th May 1968).

1. Status of the Fisheries

In 1967 the total nominal catch in Subarea 2 was 377,000 tons. This was slightly higher than that obtained in 1966 (366,000 tons).

2. Research Work Carried Out

a) Canada: On the 26th and 27th October 1967, hydrographical surveys were carried out on the southern shelf of Labrador, Geological and bathymetric work was also conducted in the same area. Drifter experiments were initiated in Div.2J to study the surface and bottom circulation. The length composition, age, sex and maturity of cod in commercial catches taken near the coast of Labrador were studied. During the cruise of A.T. Cameron in October-November the autumn distribution of cod was examined.

b) Federal Republic of Germany: Hydrographic surveys were carried out by R/V Walther Herwig between Cape Chidley and Hamilton Inlet Bank.

The distribution and abundance of cod and redfish in Subareas 2G-J was studied during a cruise of R/V Walther Herwig in October. During this period the opportunity was taken to undertake some comparative fishing trials with the Canadian research vessel A.T. Cameron. A small number of cod and redfish samples from commercial catches were examined for the purpose of determining the age and size composition.

c) Poland: The age and size composition as well as the maturities of cod were studied as were the age and size compositions of redfish and American plaice. Meristic data from cod from various parts of the convention area were presented in Res. Doc.68/71.

d) Portugal: The age and size composition of cod, its growth rate and the state of maturity were studied.

e) USSR: Hydrographical surveys were carried out. The age and size composition of cod as well as the abundance of young cod were studied. 4,158 specimens of cod were tagged.

f) UK: The usual collection of samples for the age and size composition of fish in commercial catches was made. The collection of plankton samples by means of a Continuous Plankton Recorder was continued.

3. Hydrography

Hydrographic surveys carried out by Soviet research vessels showed that, while conditions were generally colder in 1967 than they were in 1966 they were nevertheless warmer than in 1964.

However, the general thermal conditions in 1967, as in the previous two years, remained above the long-term standard.

In the Labrador-northern Newfoundland area, two temperature maxima were recorded: one in February and the other in November 1967.

As a result of surveys by Soviet vessels, a hypothesis was formulated for predicting the distribution and abundance of commercial-sizes of cod in Subarea 2 from the prevailing water temperatures several months before.

During a cruise of the Fed. Rep. of Germany R/V Walther Herwig in October 1967, four sections across the Labrador Current were taken. These revealed temperatures at depths shallower than 200 m of less than 1°C from surface to bottom. At depths greater than 200 m temperatures generally increased to about 4°C.

Hydrographical surveys carried out on board the Soviet research vessels showed that the winter and spring time near Labrador and Newfoundland were colder in 1967 as against 1966 but warmer in comparison to 1964.

4. Plankton

The survey by the Continuous Plankton Recorder was continued (UK), covering 4,400 miles in Subarea 2.

5. Cod

Catches taken by the Polish trawlers in Div. 2J in May were mostly made up of 42-62 cm fish having ages of 5 to 9 years. In June the main bulk of cod catches was composed of 35-65 cm fish. The highest catches by the Polish trawlers in Div. 2J were taken in May (40.9 tons per day); the lowest were in November (18.8 tons per day).

The Fed. Rep. Germany trawlers showed a decrease in the catch per day for the last three years: 1965 - 31.4 tons; 1966 - 29.8 tons; 1967 - 24.5 tons. This decrease from 1966-1967 was accompanied by an impressive decrease in effort from 2,132 days fishing in 1966 to 1,251 days in 1967.

The size of cod in samples from the Portugese catches was from 22 to 91 cm. The size from 49 to 52 cm was predominant; the age was mostly 6 years.

Research by the USSR points to a decrease in the size and age of cod caught by the Soviet trawlers in Div. 2J from 1960 to 1968. Catches per hour of trawling went down from 3.7 tons in 1963 to 2.05 tons in 1967.

In catches taken by the Spanish commercial vessels the size of cod varied from 31 up to 100 cm. The size group 50 to 53 cm and fish of 6-7 years old were predominant in the landings.

6. Redfish

In commercial catches taken by the Polish trawlers the size of redfish (S. mentella) was 21 to 50 cm (mean length 35.2 cm). The size of redfish (S. marinus) was 31 to 63 cm (mean length 48.2 cm).

The catch of redfish per unit of effort by the Federal Republic of Germany in 1967 was the same as in 1966 (1.3 tons per day); catches, however, were lower.