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A. Status of the Fisheries.

In 1965 the total output of the Norwegian cod fisheries in the ICNAF area amounted to 39728 tons. As in previous years the Norwegian fishing fleet operated mainly in Subarea 1, where the total catch of cod was 33349 tons. while the catch in the other areas (mainly Subarea 3) was 6379 tons. Compared to 1964 the landings from the ICNAF area decreased by about 4%. This decrease in total catch was probably partly due to some decrease in fishing effort as fewer long liners participated in the cod fisheries in 1965 as compared to 1964.

B. Special Research Studies.

Research was carried out off west Greenland by the Norwegian R/V "Johan Hjort" from 7 April to 13 May. During this period 4 hydrographical sections were worked, 15 stations were fished for cod with bottom long line and 25 hauls with trawl were made in connection with mesh selection and cod tagging experiments. An instrument for continuous measuring of the transparency of seawater at 2 m. depth was in operation during the whole cruise. Temperature was measured on all the fishing stations and both the hydrographical and the fishing stations were sampled for cod eggs and larvae. (Manuscript)

The sampled material is unfortunately not worked up in detail but some preliminary results are given below:

I. Environmental Studies

1. Hydrography. Several hydrographical stations had to be omitted as heavy drift ice concentrations covered the southern bank areas between Cape Farewell and the southern part of the Frederikshaab Bank. In the north ice covered the bank areas north of the northwestern part of Lille Hellefiske Bank and Holsteinsborg.

In spite of the heavy drift ice conditions the surface temperatures in the investigated area were higher than in 1963 and 1964. On the western slopes of the banks water with temperatures below 2°C penetrated down to 130 - 160 m. while the thermocline was found in 20 - 50 m. west of the banks. The Atlantic component of the West Greenland Current seemed to be warmer than normal and the amount of water with temperatures about 5°C was greater than usual.

II. Biological Studies

1. Length and age composition of the cod stock. The mean length of the cod in the bottom long-line catches varied greatly in the different catches, from 62.3 cm. to 68.2 cm. In Division 1C the mean length was 66.5 cm., in 1D 66.4 cm. and in 1F 64.5 cm. The overall mean length in the bottom long-line catches was 65.8 cm. a considerable decrease from 1964.

Of special interest were two bottom long-line catches taken in deep water, 450-600m., west of Banan Bank. The mean length of the cod in these two catches was about 88 and 90 cm. These fish seem to live in the deep water throughout the year and do not seem to mix with the ordinary West Greenland cod population. These two catches were not taken into account in making the calculations of the mean lengths mentioned above.

The mean length of the cod in the trawl catches in Division 1C was 55.0 cm. and in 1D 64.4 cm. Compared to 1964 the overall mean length in the trawl catches decreased from 63.6 cm. to 60.0 cm.

The decrease in mean length was probably due to the dominance of the 1960 year-class. In bottom long-line catches, this year-class constituted in 1C 52%, in 1D 51% and in 1F 24%. In the trawl catches the 1960 year-class constituted in 1C 61% and in 1D 46%. Other important year-classes in the long-line catches were in 1C the 1959 and 1957 year-classes, in 1D the 1959 year-class and in 1F the 1961 and 1959 year-classes. In the trawl catches also the 1961 and 1959 year-classes were of importance in 1C and the 1961, 1959 and 1958 year-classes in 1F.