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Status of fisheries and research carried out in Subarea 2 in 1973

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Reports on research in Subarea 2 in 1973 are contained in Summary Documents 21(Canada), 24(Norway), 26(USSR), 30(Denmark), 31(UK), 32(Poland) and 33(FRG). Results of specific research studies are contained in Research Documents 2, 3, 4, 5, 6, 7, 12, 38, 40, 48, 55, 67, 69, 71, 73, 79, 84, 89, 103, 104.

1. Status of Fisheries

Nominal catches of the major species fished in Subarea 2 during the past 5 years are listed in Table 1. A sharp decline is evident, with the total catch in 1973 being only one-third that of the peak year of 1969. Major changes have occurred in the fisheries for cod which were at a very low level in 1973 due largely to adverse ice conditions in the area, roundnose grenadier for which a large catch occurred in only one year, and capelin for which the new fishery in 1972 increased to 60,000 tons in 1973. The fishery for all species except Greenland halibut occurred almost entirely in Div. 2J; the Greenland halibut fishery was significant in all 3 divisions.

Table 1. Nominal catches from Subarea 2, 1969-73 ('000 tons).

	1969	1970	1971	1972	1973
All species	490	255	246	220	160
Cod	454	224	163	163	59
Redfish	8	11	7	10	12
American plaice	+	2	2	5	2
Witch flounder	+	5	2	1	1
Greenland halibut	13	6	10	13	14
Roundnose grenadier	1	1	57	3	7
Capelin	+	-	-	18	60

+ catch less than 500 tons

see ICNAF Annu. Rept. Vol. 24: 119-121

Table 2. Nominal catches of cod in Subarea 2, 1969-73, by country ('000 tons).

	1969	1970	1971	1972	1973
Canada	5	2	3	2	5
Denmark	-	-	-	-	+
France	30	16	6	5	1
FRG	72	50	20	10	8
GDR	42	4	9	11	2
Norway	7	3	6	1	1
Poland	62	36	17	19	3
Portugal	66	42	34	20	13
Romania	3	3	1	1	+
Spain	33	11	6	2	1
USSR	131	50	62	90	25
UK	2	3	-	3	1
USA	+	1	-	-	-
Total	454	224	163	163	59

+ catch less than 500 tons

Declines in cod catches were registered by all countries except Canada, where the inshore fisheries increased from 1729 tons in 1972 to 4744 tons in 1973 (Table 2). A small cod fishery was carried out for the first time by Denmark.

2. Work Carried Out

- (a) Canada. Monitoring of size and age composition in the coastal cod fishery was continued. Other studies were conducted on redfish (survey cruises on the shelf and over oceanic depths) and Atlantic salmon (tagging and commercial sampling). Hydrographic observations were made in August.
- (b) Fed. Rep. Germany. A groundfish survey and 3 hydrographic sections were completed in November. Commercial samples of cod and redfish were collected in March.
- (c) German Democratic Republic. Biological sampling for length and age was carried out from cod and roundnose grenadier fisheries.
- (d) Norway. Research on harp and hooded seal stocks was continued.
- (e) Poland. Commercial catches of cod and redfish were sampled for size and age.
- (f) USSR. Hydrographic observations were made in November. Cod were sampled for size and age. Tagging experiments were conducted on cod and American plaice. A survey for cod eggs extended into the southern part of the area.
- (g) UK. The continuous plankton recorder survey sampled 2253 miles in the area in 1973.

3. Hydrography

Surface temperatures over the Labrador shelf were above average in July-August, and lower than the 1951-71 average at intermediate depths, though not as low as in 1972. In the deep slope water, however, temperatures were even lower than the abnormally low temperatures of 1972. In November, the Arctic component was warmer and the slope water cooler than in previous years.

Ice conditions were again severe in late winter and early spring, as in 1972. The USSR fleet was forced to leave the area in February, and several national research reports make reference to the severe ice conditions which limited fisheries in the area early in 1973.

4. Plankton

The continuous plankton recorder survey indicated low abundance of phytoplankton in the area during the first half of 1973, but above average abundance in October and December. Total copepods were above average in the May to July period. Young stages of Sebastes were unusually abundant in May in Subarea 2. Abundance of cod eggs off southern Labrador was about one-half that in 1970 and 1972, and, as in 1972, spawning was later than usual (Res.Doc. 74/55).

5. Cod

The fisheries were severely restricted by ice conditions during the first part of 1973, i.e. the period when the fishery is most productive, and cod catches totalled only 59 thousand tons. USSR sampling showed that cod of 40-60 cm and the 1964 to 1967 year-classes were most numerous in the catches. The 1966 and 1967 year-classes are believed to be relatively strong. Average size in Polish catch samples increased from 45 cm in January to 50 cm in March. Samples from the GDR fisheries showed the 1966 and 1967 year-classes as most abundant. The cod sampling by FRG also confirms the dominance of these year-classes. Younger fish were taken in January as evidenced by size compositions from commercial sampling in that month. The year-classes of 1969 and 1970 are considered to be relatively poor.

6. Redfish

Attempts to locate commercial concentrations over oceanic depths during a Canadian survey in the June to August period were unsuccessful. Sampling of Polish catches of redfish showed that fish of length 21 to 30 cm were most common in the catches.

7. Flatfishes

The fishery for Greenland halibut has in recent years extended northward beyond Subarea 2 and westward from Subarea 1 to waters outside the Convention Area east of Baffin Island. Catches in 1972 were about 10,000 tons. Sampling of Danish (Greenland) trawler catches in August indicated a mean length of 67 cm and an estimated discard rate of 5-10% by numbers.

8. Roundnose Grenadier

This species is also taken off Baffin Island (5,783 tons in 1972) outside the Convention Area. GDR sampling in Div. 2G in November indicated a wide range of lengths and ages in the catch (36 to 80 cm with an average length of 66 cm, age 9 to 22 years with ages 15 to 19 dominant).

