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French Research Report (Saint Pierre and Miguelon), 1977

by

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In 1977, the catch amounted to a total of 7,011 metric tons of various fishes caught from Subarea 3 and 4, which is by 1,319 tons less than in 1976.

I - Subarea O.

B/ Special Research Studies.

From a research groundfish survey carried out on board the R/V CRYOS from 16 September to 23 October 1977 on the Baffin Island Shelf, numerous data were collected on the northern deepwater prawn Pandalus borealis.

Results on distribution and abundance, minimum biomass estimate, by catches, compositions in length and ages and biometrical relationships are presented in ICNAF Res.Doc. 77/XI/70.

Another paper (ICNAF Res.Doc. 78/VI/45) deals with informations on distribution, abundance and minimum trawable biomass estimates on the main commercial species of fishes caught during the survey.

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For the purpose of this groundfish survey off Baffin Island a stratification scheme was developed, based on Canadian chart no 7011 (Res.Doc. 78/VI/64).

II - Subarea 3.

A/ Status of the Fisheries.

The total catch of 4,125 tons shows that a great portion of redfish (1,464 tons) was caught during the two first quarters on the year in Division 3 P.

After redfish, cod is the main species caught in that SA. The total catch of 1,230 tons includes landing of traditional fishing which was only carried out in Subdivision 3 Ps, from May to November.

In addition to those species, we must note squid (589 tons) caught in Subdivision 3 Ps, yellowtail (251 tons), american plaice (98 tons) and witch (66 tons).

B/ Special Research Studies.

Throughout the year 1977, various investigations were carried out by the R/V CRYOS:

- Research on cod from 25 January to 16 February, in Divisions 3 Pn, 3 Ps, 3 K and 3 L.
- Groundfish survey from 19 to 31 April.
- Squid and groundfish survey from 30 October to 16 November.

1. Cod.

Biological study of cod was continued specially on the stock submitted to french fishery effort in Subdivisions 3 Pn and 3 Ps and in Divisions 3 K and 3 L. 12,226 specimens were measured and sexed. 88 stomachs and 2,034 otoliths were collected. The length-age keys for all those stocks were forwarded to the ICNAF Secretary.

In Subdivision 3 Pn, lengths ranged from 15 to 93 cm with a modal value of 63 cm and age ranged from II to XIV with predominance to the age groups VI, III and V_{\bullet} by order of importance.

In Subdivision 3 Ps, lengths ranged from 15 to 150 cm and age ranged from I to XVI, with predominance to the age groups III, IV and V_{\bullet}

2. Redfish.

Data on length frequencies were collected in Divisions 3 K and 3 P. $\,$

- 3 K, lengths ranged from 19 to 48 cm with a modal value of 28 cm
- 3 Ps, in April lengths ranged from 8 to 45 cm, with two modal values of 15 and 20 cm
- 3 Pn, in February lengths ranged from 9 to 45 cm with a modal value of 19 cm.

3. American plaice.

American plaice was studied in Division 3 L and Subdivision 3 Ps. $\,$

Length and age compositions observed were forwarded to the ICNAF Secretary.

In Subdivision 3 Ps, length ranged from 12 to 52 cm, for male, with a modal value of 24 cm, and from 12 to 72 cm, for female, with a modal value of 26 cm.

III - Subarea 4.

A/ Status of the Fisheries.

The total catch of 2,886 metric tons is mainly formed with cod (2,555 tons) and redfish (202 tons).

As in previous years, the cod-fishery took place from January to May in Divisions 4 R and 4 Vn.

B/ Special Research Studies.

1. Cod.

Here again biological data were obtained from a research survey on board the R/V CRYOS in Division 4 R_{\bullet}

9,237 fishes were measured and sexed. 97 stomachs and 754 otoliths were collected.

Lengths ranged from 21 to 81 cm with a modal value of 51 cm; age ranged from III to XIII, with predominance to the age groups V and VI.

2. Redfish.

Data on length frequencies were collected in Division 4 R_{\bullet} Lengths ranged from 10 to 42 cm with two modal values of 20 and 32 cm.