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Japanese Research Report for 1986

by

S. Kawahara

Far Seas Fisheries Research Laboratory Orido, Shimizu 424, Japan

The total nominal catch by Japanese trawlers (joint ventures included) from the NAFO waters in 1986 was 11,800 tonnes, a significant increase (38 %) from 8,500 tonnes in 1985 (Table 1). This is mainly due to increases in the catches of redfish in Divisions 1E, 3K, 30 and 4Vs, and Greenland halibut in Division 2J. The catches of <u>Illex</u> in Subareas 3-6 still remained at the lowest level.

The number of Japanese trawlers operated in the NAFO waters slightly changed from twelve in 1985 to thirteen in 1986. They were one 3,000, five 2,000, three 1,000, two 500 and two 350 GRT class stern trawlers. Total fishing effort increased remarkably from 6,000 hours fished in 1985 to 9,800 hours in 1986. The increase occurred in Divisions 1E, 2J, 3K, and 4Vs, as in the catch. On the other hand, fishing efforts in Subareas 5 and 6 continued to decline, because of the reduction in quota allocated.

The main fishing grounds of Japanese trawlers were located on the continental slopes off West Greenland (Divisions lEF), Labrador (2J), Newfoundland (3KMO), and Nova Scotia (4Vs). Japanese trawlers moved seasonally among these main fishing grounds, as done in the previous years.

I. Subarea l

A. Status of the Fisheries

Ten trawlers operated in Divisions 1D-1F sporadically during May-December and caught about 2,100 tonnes of fish, mostly composed of redfish. Redfish was taken at depths between 120-360 m. The mesh sizes of the cod-ends used were 140-160 mm.

B. Special Research Studies

1. Biological Studies on Redfish and Greenland halibut

Frozen samples of redfish and Greenland halibut were collected on board the Japanese commercial vessels operating off East and West Greenland. Biological measurements of these samples were continued and a preliminary electrophoretic analysis of enzymes from redfish is being made at our Laboratory.

II. Subarea 2

A. Status of the Fisheries

The fishery directed to Greenland halibut was carried out in the waters between 400-750 m deep in Divisions 2HJ during June-December. At the shallower depths (260-450 m) in Divison 2J, redfish was targeted too. The Greenland halibut catch greatly increased from about 60 tonnes in 1985 to 1,200 tonnes in 1986. The mesh sizes of the cod-ends used were 130-140 mm.

III. Subarea 3

A. Status of the Fisheries

The redfish-directed fishery was carried out between 250-670 m in Divisions 3K, 3L, 3M, 3N and 30 sporadically all the year round. The total redfish catch increased from 4,700 tonnes in 1985 to 5,700 tonnes in 1986, which were taken mainly in Divisions 3K and 30 as in the previous year. Some fishing operations directed to Greenland halibut were made at depths around 500 m in Division 3K, but the result was unsuccessful. The mesh sizes of the cod-ends used were 60-90 mm in Division 30, and 130-140 mm in other Divisions.

IV. Subarea 4

A. Status of the Fisheries

The redfish-directed fishery was carried out in Divisions 4Vn and 4Vs in March-December. About 1,500 tonnes of redfish were caught at depths between 250-670 m. The mesh sizes of the cod-ends used were 60-90 mm.

- 2 -

V. Subareas 5 and 6

A. Status of the Fisheries

The small-scaled squid-<u>Loligo</u> fishery was carried out along the edge of the continental shelf (100-160 m) during January-February under the extremely reduced quota. The mesh sizes of the cod-ends used were 45 mm. Table 1. Fishing efforts and catches by species of Japanese trawl fishery in each NAFO Division in 1985 and 1986.

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Year									1985												
Division	18	IC	a	IÊ	ΙF	2H	2.1	ЭК	31	æ	NE	30	4Vn	4Vs	4M	4X	5Ze	SZw	¥9	6B	Total
Hours fished	38	8	337	351	409	•	226	1,132	199	685		459	138	938	95	8	36	103	296	454	5,983
Days fished	S	1	39	47	55	I	19	149	14	59	ł	44	14	78	11	ŝ	4	10	ନ	45	633
Total catch	30	23	313	607	707	۱	111	3,927	132	338	1	720	72	985	88	12	52	53	134	241	8,544
Cod	ı	ł	9	42	Q	ı	ŝ	59	1	4	t	0	Ś	10	I	1	1	I	I	I	137
Redfish	26	18	294	556	869	1	25	3,578	129	313	ı	660	61	853	6	ı	ı	ı	٥	0	7,220
Silver hake	1	ı	ı	ľ	I	ì	ł	,	٢	ı	1	2	ł	45	68	80	n	7	8	24	164
Greenland halibut	e	I	1	•	I	I	64	196	1	13	ł	0	1	¢	a	ł	J	ł	I	ı	277
Årgentine	ı	I	I	1	t	I	1	I	I	I	I	2	ł	20	0	2	Ţ	I	I	I	25
Squid- <u>Loligo</u>	ı	ı	ı	I	I	•	4	۲	1	ı	I	ı	I	ı	ı	ı	1	17	62	83	163
Squid- <u>Illex</u>	ı	ł	t	I	I	ı	ı	ı	,	٢	ł	,	'	'	ŕ	0	1	0	2	2	8
Others	-	4	12	\$	'n	ı	17	96	2	8	I	56	ŝ	57	80	2	47	29	62	132	550
Year									1986												
Division	18	IC	01	JE	1F	2H	2.3	ЭК	3L	HE.	NE	30	4 V n	4Vs	4M	¥7	5Ze	52w	6A	6B	Total
Hours fished	1)	142 1	,198	462	126 1	.903	2,307	86	657	e	727	463 1	,370	109	•	39	33	201·	17	9,841
Days fished	ī	I	20	157	74	12	118	210	12	64	-	62	29	95	8	I.	9	'n	19	5	892
Total catch	۱.	4	60 1	,407	610	49 1	,496	4,270	140	442	12 1	,208	298 1	382	125	•	57	22	220	80	11,806
Cod	Ŧ	ı	0	10	1	0	73	96	-	5	ı	I	ł	29	I	I	ı	I	ı	ı	217
Redfish	ı	I	59 1	, 382	602	1	189	3,986	134	399	12 1	, 161	256 1	,190	43	1	ł	,	•	ı	9,414
Silver hake	,	ı	ı	ľ	ı	ı	I	ł	ł	ı	r	15	ı	23	41	ı	7	ı	-	0	83
Greenland halibut	ī	ł	ł	0	t	42 1	, 146	87		35	ı	e	2	0	ı	ı	I	ı	ı	ı	1,316
Argentine	r	ı	ı	ī	ı	I	1	ł	'	ı	ı	4	0	38	2	ı	ł	ł	I	I	77
Squ1d-Loligo	ı	ı	۱	ľ	ı	I	I	I	I	ı	Ţ	ı	ł	ı	ı	ı	12	80	110	e	133
Squid- <u>Illex</u>	ı	r	t	I	I	I	I	I	ł	•	ł	ı	ı	•	•	i	ł	1	1	ı	1
Others	ī	ī	I	15	7	9	88	101	4	e	0	24	39	102	39	ı	£7	14	108	ŝ	598

- 4 -