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Japanese Research Report, 1975

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The Japanese trawlers, one small vessel less than 1,000 GRT, 4 medium sized vessels of 1,000-2,000 GRT and 9 large vessels over 2,000 GRT, fished in Subareas 3, 4 and 5 and in Statistical Area 6 during 1975, yielding a preliminary total of 25,090 tons. The amount is around 3,800 tons less than in the previous year.

The principal species caught were common American squid (11,090 tons), short finned squid (3,670 tons), butterfish (3,612 tons), capelin (2,881 tons) and herring (2,076 tons).

Subarea 3

A. STATUS OF THE FISHERIES

The total catch by Japanese trawlers fairly increased from 1,241 tons in 1974 to 3,040 tons in 1975 with a notable change in the species composition of the catch. Owing to the heavy concentration of fishing efforts on capelin, the catch of capelin by Japanese trawlers substantially increased in 1975 and accounted for about 95 percent of the total catch. The main fishing grounds for capelin were observed in 3N where around 78 percent of them were obtained.

Annual changes in the catch by species and the amounts of effort by Japanese trawlers during the period 1969 - 1975 are shown in Table 1.

Table 1. Catch in Subarea 3, 1969-1975.

Year	1969	1970	1971	1972	1973	1974	1975*
Hours fished -	410	1,861	3,160	902	1,059	1,178	-
Total catch in tons	810	3,511	8,136	1,558	3,041	1,241	3,040
Capelin	-	-	-	-	-	-	2,881
Argentine	106	793	444	165	101	546	-
Flatfishes	21	4	1	2	8	-	-
Cod	83	49	14	1	-	-	-
Haddock	1	6	-	-	3	-	-
Redfish	533	2,586	7,600	1,345	2,898	668	29
Herring	-	0	-	0	1	-	-

\* Preliminary

B. SPECIAL RESEARCH STUDIES

1. Biological Studies

Length measurements of capelin and redfish were carried out on board the commercial trawlers in Division 3N and 3P.

Subarea 4

A. STATUS OF THE FISHERIES

The total catch by Japanese trawlers remained on the low level of about 1,200 tons with the general decrease in the catches of main species except for Illex squid and argentine.

The main fishing grounds for Illex squid were located in 4X.

Table 2. Catch in Subarea 4, 1969-1975

Year	1969	1970	1971	1972	1973	1974	1975*
Hours fished	896	2,176	1,673	2,306	3,334	1,408	-
Total catch in tons	1,936	4,779	4,499	4,412	4,953	1,607	1,222
Argentine	1,256	2,940	2,879	446	209	80	128
Flatfishes	21	9	1	23	20	310	-
Silver hake	213	128	9	96	91	62	54
Cod	39	154	6	46	23	0	-
Haddock	20	13	1	2	10	8	-
Pollock	-	-	10	12	1,554	39	-
White hake	-	17	31	16	5	5	-
Redfish	251	967	1,164	2,298	1,746	169	27
Herring	14	100	88	1,394	1,055	865	200
Squid (Illex)	-	7	44	15	7	-	433

\* Preliminary

B. SPECIAL RESEARCH STUDIES

1. Biological Studies

Length measurements were carried out on board the commercial trawlers for butterfish in 4X.

2. Exploratory Fishing

As was done in the previous year, an exploratory fishing on Illex squid by means of the jigging was carried out by JAMARC (Nippon Kaiyo Suisan Shigen Kaihatsu Center) in the Nova Scotia and Georges Bank waters in the depth of 150 m to 200 m during June to October.

Subarea 5

A. STATUS OF THE FISHERIES

The total catch by Japanese trawlers sharply decreased from 13,490 tons in 1974 to 7,050 tons in 1975. The drastic change was mainly caused by the substantial decline in the catches of Loligo squid and butterfish. Main fishing grounds for squids, both of Loligo and Illex, were observed in 5Ze and for butterfish in 5Zw.

Table 3. Catch in Subarea 5, 1969-1975.

Year	1969	1970	1971	1972	1973	1974	1975*
Hours fished	8,216	9,310	10,196	10,387	8,918	14,034	-
Total catch in tons	8,789	10,722	16,938	12,745	10,710	13,490	7,050
Argentine	976	368	5,739	86	90	-	0
Flatfishes	79	138	7	6	16	45	5
Silver hake	229	73	195	175	202	61	1
Cod	45	15	19	100	3	-	-
White hake	-	158	109	100	1	1	-
Redfish	61	19	5	16	33	1	18
Butterfish	1,291	1,724	867	1,177	2,289	3,039	956
Herring	527	1,222	3,109	1,295	1,652	2,537	1,876
Mackerel	197	463	322	583	149	23	61
Squid(Loligo)	3,902	5,086	5,008	7,871	5,661	6,238	3,097
Squid(Illex)	-	-	-	183	147	818	544

\* Preliminary

B. SPECIAL RESEARCH STUDIES

1. Biological Studies

Length measurements were carried out on board the commercial trawlers for redfish, butterfish, herring, Loligo squid and Illex squid.

Stock assessment of Loligo squid was renewed based upon the recent data of Japanese catch records and the informations on age and growth.

Age and growth studies on butterfish have been carried out as the basic investigation for the stock assessment. The preliminary report concerned will be documented in near future.

Subarea 6

A. STATUS OF THE FISHERIES

The total catch by Japanese trawlers in 1975 showed an increase of around 1,300 tons compared with the previous year.

The principal species caught were butterfish, Loligo squid and Illex squid, and the combined catch of these three species accounted

for 94 percent of the total catch in 1975. The main fishing grounds for squids, both of *Loligo* and *Illex*, were observed in 6B and for butterfish in 6A.

Table 4. Catch in Subarea 6, 1969-1975.

Year	1969	1970	1971	1972	1973	1974	1975*
Hours fished	8,623	16,112	13,564	13,498	20,639	22,236	-
Total catch in tons	8,133	18,933	13,688	14,961	22,180	12,510	13,778
Flatfishes	314	167	55	24	50	47	8
Silver hake	44	255	80	260	251	53	-
White hake	-	58	105	12	4	-	-
Butterfish	2,010	6,897	4,914	2,637	9,882	1,592	2,656
Mackerel	326	1,036	838	1,005	295	53	142
Squid( <i>Loligo</i> )	3,805	8,275	6,478	7,970	8,795	7,127	7,604
Squid( <i>Illex</i> )	-	-	-	2,207	918	2,735	2,661

\* Preliminary

#### B. SPECIAL RESEARCH STUDIES

##### 1. Biological Studies

Length measurements were carried out on board the commercial trawlers for butterfish, Atlantic mackerel, *Loligo* squid and *Illex* squid in each Division.