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Catches and estimated fishing activity in
Subareas 2 and 3, 1966 and 1967

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Introduction

Fishing activity estimates for 1967 have been derived from Statistical Bulletin Vol. 17 as outlined by May (1968, Res. Doc. 68/93). These are listed in Table 1, along with catch summaries for 1967 and 1968, and comparative material for 1966. Cod accounts for more than 90% of the total fish catch in Subarea 2, and about 70% in Subarea 3. Cod catches are listed by Division and major gear component in Table 2, allowing a closer analysis of the large increase in catch in 1967-68 in Subarea 3, and in 1968 in Subarea 2.

Catches and Fishing Activity, 1966-67, and Provisional Catches, 1968

In Subarea 2, cod catches by otter trawlers declined about 12% in 1967 while catches of other species remained relatively small, resulting in an overall decrease of 10% in total catch from 1966. Effort by trawlers of 501-900 GRT declined, but that of trawlers >900 tons increased. Overall, there was a slight reduction both in estimated fishing activity and in catch per day in 1967. Most of the catch reduction occurred in Division 2H. In 1968, however, the cod catch increased 36% due to increased fishing in Division 2J, and for the first time exceeded 400 thousand tons.

Groundfish catches in Subarea 3 in 1967 exceeded one million tons for the first time and approached one million tons in 1968, representing a doubling of the groundfish catch from the recent low point of 1962. Over this same period the cod catch has almost doubled from 389 to 743 thousand tons. From 1966 to 1968 both cod and total catches increased about 50%. Catches of herring and flounders were also very much larger than in previous

years. The herring catch in 1968 was almost 7 times that in 1966, and was double the 1967 catch. Herring is now the second most important species in terms of total catch. Redfish catches declined substantially in 1968 and haddock catches remained at a very low level.

The increased cod catches were due to increased offshore fishing and occurred in all Divisions over the 1966-68 period. The greatest increase in 1967 occurred on the Grand Bank (Divisions 3L, 3N and 3O). In Division 3NO in particular the cod catch in 1967 was 3 times the 1962-66 average and was more than double the previous maximum. This is also more than double the estimated long-term maximum yield (Beverton, 1965, ICNAF Res. Bull. 2, pp. 59-72). Catches in Divisions 3NO declined almost 30% in 1968, but remained high in Division 3L and increased by more than 50% in Division 3K, resulting in an overall slight increase for Subarea 3 as a whole.

Estimated fishing activity in 1967 by all tonnage classes of otter trawlers above 500 GRT increased from 1966. Overall estimated fishing activity was more than 30% greater in 1967, and was slightly above the previous maximum in 1965. Catch per day, however, both in 1966 and 1967, was substantially greater than in 1965. This was due largely to increased C/E for trawlers >1800 GRT. These also increased fishing activity from 3 to 9 thousand days fished during 1965-67.

A more detailed analysis of changes in the 3NO cod fishery is given by Pinhorn /1969, Res. Doc.69/83/

In Subareas 2 and 3 as a whole cod catches have increased from 0.8 to 1.1 million tons during 1966-68 while total fish catches have increased from 1.1 to 1.6 million tons. Initial increases in cod catches were made in Divisions 3L, 3N and 3O (1967). Catches declined in Divisions 3N and 3O in 1968, remained high in Division 3L, and increased in Divisions 2J and 3K to give an overall increase in cod catches for Subareas 2 and 3 combined of 160 thousand tons from 1967 to 1968. Combined Subareas 2 and 3 inshore cod catches have declined slightly from 1966 to 1968. Increased catches of other species during the 1966-68 period are accounted for mainly by increased catches of herring and flounders in Subarea 3.

Table 1. Catches, catch per day, and estimated fishing activity in Subareas 2 and 3, 1966 and 1967. + indicates <500 tons caught or <50 days fished. 1968 catches are provisional.

			Subarea 2			Subarea 3		
			1966	1967	1968	1966	1967	1968
Catches ('000 tons)	COD	Otter T.	313	268	(390)	283	473	?
		Inshore	24	27	13	112	102	114
		Other	1	3	(3)	104	146	?
		Total	338	298	406	499	721	743
		HADDOCK	+	+	+	10	11	6
		REDFISH	14	17	5	79	89	48
		HALIBUT	1	3	3	1	7	7
		FLOUNDERS	3	5	5	111	151	149
		OTHER GROUND FISH	9	4	4	11	23	29
		TOTAL GROUND FISH	365	327	423	711	1002	982
	HERRING	-	-	-	23	78	155	
	OTHER PELAGIC	-	-	-	1	2	1	
	TOTAL PELAGIC	-	-	-	24	80	156	
	OTHER FISH	1	1	4	7	11	17	
	TOTAL FISH	366	328	427	742	1064	1155	
Groundfish Catches ('000 tons)	OT	<50				1	+	
	"	51-150				2	1	
	"	151-500			+	117	119	
	"	501-900	95	19		51	72	
	"	901-1800	141	148		168	259	
	"	>1800	105	130		122	261	
	"	>500	341	297		341	592	
Days Fished (000's)	OT	<50				0.4	0.2	
	"	51-150				0.7	0.5	
	"	151-500			+	12.1	14.0	
	"	501-900	3.9	1.3		3.3	5.3	
	"	901-1800	6.1	6.7		8.7	12.7	
	"	>1800	3.1	4.2		4.6	9.0	
	"	> 500	13.0	12.2		16.6	27.0	
Tons/Day	OT	<50				3	2	
	"	51-150				3	3	
	"	151-500			5	10	8	
	"	501-900	24	15		16	14	
	"	901-1800	23	22		19	20	
	"	>1800	34	31		27	29	
	"	>500	26	24		21	22	
Fishing Activity for Groundfish in 000's equivalent days by trawlers >500 GRT			14.0	13.4		34.5	45.7	

Table 2. Cod Catches by Division and Gear, Subareas 2 and 3, 1966 and 1967 with provisional catches by Division only, 1968. Figures are thousands of tons. + indicates <500 tons.

	1966					1967					1968
	Otter Trawl	Pair Trawl	Inshore	Other	Total	Otter Trawl	Pair Trawl	Inshore	Other	Total	Total
2G	15	-	+	-	15	2	-	+	-	2	9
2H	78	-	1	-	79	54	-	1	-	55	47
2J	220	1	23	-	244	212	+	26	+	239	334
2NK	-	-	-	-	-	-	-	-	2	2	16
Total	313	1	24	-	338	268	+	27	2	268	406
3K	58	+	32	+	90	77	+	25	+	102	157
3L	107	13	54	8	182	172	25	47	14	258	266
3M	29	-	-	-	29	36	1	-	-	37	34
3N	44	29	-	2	75	74	41	-	2	117	92
3O	10	20	-	+	30	76	28	-	2	106	67
3Pn	8	1	3	2	14	16	+	3	1	20	12
3Ps	17	22	23	2	64	12	20	26	3	61	75
3NK	11	-	-	4	15	9	-	-	11	20	40
Total	284	85	112	18	499	472	115	101	33	721	743