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Species mix in Canadian groundfish landings
from ICNAF Divisions 4V and 4W

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In order to supply information on species mix in Canadian landings of groundfish from ICNAF Divisions 4V and 4W, detailed statistical data on IBM cards for landings by Canadian offshore vessels were summarized for 1968 and 1969. Tables showing main species caught (cod, haddock, redfish, halibut, flounders, others), area, gear (otter trawl, longline or Danish seine), total weight in metric tons by months and percent of each species by years were run for all data available for the two years. In order to reduce the bulk of the data for this document, only significant tables for 1969 are attached (Tables 1-19) as examples. Corresponding summaries by main species, area, and gear were very similar in the two years.

The criterion used for main species was the species, the total weight of which was greatest in the particular landing. Discards were not taken into account due to lack of data.

The tables generated were assessed and significant other species accompanying a main species in the landings are indicated in Table 20. It is of interest to note variations in the species mix by area and gear. It is apparent that selection by fishing gear and distribution of major aggregations of fish are main factors in determining species mix in landings.

TABLE 1.

SPECIES COMPOSITION

CANADA MAR. AND QUE. GEAR OTTER TRAWL DIVISION 4W YEAR 1969

LANDINGS FROM TRIPS WHEN COD MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	845.	230.	2.	6.	82.	300.
FEB.	807.	289.	5.	7.	134.	164.
MAR.	152.	63.	0.	4.	23.	21.
APR.	106.	75.	1.	1.	14.	34.
MAY	197.	113.	0.	1.	24.	41.
JUNE	76.	23.	0.	0.	2.	35.
JULY	8.	7.	1.	0.	3.	3.
AUG.	0.	0.	0.	0.	0.	0.
SEP.	0.	0.	0.	0.	0.	0.
OCT.	10.	6.	0.	0.	0.	2.
NOV.	8.	6.	1.	1.	2.	5.
DEC.	330.	127.	8.	2.	64.	183.
TOTAL	2540.	937.	18.	22.	348.	787.
PERCENT	54.6	20.1	0.4	0.5	7.5	16.9

TABLE 2.

SPECIES COMPOSITION

CANADA MAR. AND QUE. GEAR OTTER TRAWL DIVISION 4W YEAR 1969

LANDINGS FROM TRIPS WHEN HADDOCK MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	296.	596.	3.	5.	34.	179.
FEB.	354.	748.	20.	7.	55.	173.
MAR.	349.	3020.	28.	32.	300.	433.
APR.	234.	1114.	7.	14.	128.	199.
MAY	164.	471.	6.	6.	59.	176.
JUNE	19.	149.	0.	1.	5.	5.
JULY	22.	99.	3.	1.	5.	24.
AUG.	12.	94.	0.	1.	5.	12.
SEP.	3.	53.	0.	1.	4.	3.
OCT.	12.	89.	0.	1.	3.	8.
NOV.	6.	16.	1.	0.	1.	5.
DEC.	14.	37.	6.	0.	3.	16.
TOTAL	1484.	6488.	73.	69.	602.	1231.
PERCENT	14.9	65.2	0.7	0.7	6.1	12.4

TABLE 3.

SPECIES COMPOSITION

CANADA MAR. AND QUE. GEAR OTTER TRAWL DIVISION 4W YEAR 1969

LANDINGS FROM TRIPS WHEN REDFISH MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	0.	0.	0.	0.	0.	0.
FEB.	0.	0.	0.	0.	0.	0.
MAR.	0.	0.	0.	0.	0.	0.
APR.	0.	1.	1.	0.	0.	0.
MAY	0.	1.	14.	0.	0.	1.
JUNE	0.	0.	233.	0.	0.	2.
JULY	1.	1.	474.	0.	0.	24.
AUG.	5.	6.	438.	1.	2.	38.
SEP.	0.	2.	404.	1.	0.	7.
OCT.	0.	2.	28.	0.	1.	0.
NOV.	0.	0.	5.	0.	0.	1.
DEC.	3.	0.	6.	0.	8.	0.
TOTAL	10.	12.	1602.	2.	10.	73.
PERCENT	0.6	0.7	93.7	0.1	0.6	4.3

SPECIES COMPOSITION

TABLE 4.

CANADA MAR. AND QUE. GEAR OTTER TRAWL DIVISION 4W YEAR 1969						
LANDINGS FROM TRIPS WHEN FLOUNDERS MAIN SPECIES CAUGHT						
MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	52.	0.	6.	0.	288.	0.
FEB.	86.	29.	2.	1.	282.	3.
MAR.	18.	0.	3.	0.	23.	0.
APR.	6.	13.	2.	0.	19.	4.
MAY	0.	0.	0.	0.	0.	0.
JUNE	0.	0.	0.	0.	0.	0.
JULY	0.	0.	0.	0.	0.	0.
AUG.	0.	0.	0.	0.	0.	0.
SEP.	0.	0.	0.	0.	0.	0.
OCT.	6.	6.	0.	0.	50.	0.
NOV.	0.	1.	0.	0.	1.	1.
DEC.	76.	46.	5.	2.	237.	88.
TOTAL	244.	94.	16.	3.	899.	96.
PERCENT	18.0	6.9	1.2	0.2	66.5	7.1

TABLE 5.

SPECIES COMPOSITION

CANADA MAR. AND QUE. GEAR OTTER TRAWL DIVISION 4W YEAR 1969						
LANDINGS FROM TRIPS WHEN OTHERS MAIN SPECIES CAUGHT						
MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	40.	23.	0.	1.	4.	64.
FEB.	0.	0.	0.	0.	0.	0.
MAR.	0.	2.	0.	0.	0.	7.
APR.	0.	0.	0.	0.	0.	0.
MAY	50.	118.	6.	2.	12.	251.
JUNE	9.	6.	0.	0.	1.	21.
JULY	17.	13.	0.	0.	4.	45.
AUG.	0.	0.	0.	0.	0.	0.
SEP.	0.	0.	0.	0.	0.	0.
OCT.	5.	8.	8.	0.	2.	22.
NOV.	5.	18.	2.	0.	1.	48.
DEC.	16.	53.	0.	1.	27.	105.
TOTAL	142.	240.	17.	4.	50.	563.
PERCENT	14.0	23.6	1.7	0.4	4.9	55.4

TABLE 6.

SPECIES COMPOSITION

CANADA MAR. AND QUE. GEAR LONGLINE DIVISION 4W YEAR 1969						
LANDINGS FROM TRIPS WHEN COD MAIN SPECIES CAUGHT						
MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	119.	0.	0.	0.	0.	0.
FEB.	38.	0.	0.	0.	0.	3.
MAR.	23.	7.	0.	1.	0.	5.
APR.	21.	0.	0.	0.	0.	0.
MAY	80.	1.	0.	1.	1.	2.
JUNE	56.	1.	0.	2.	1.	2.
JULY	26.	0.	0.	1.	0.	1.
AUG.	39.	4.	0.	0.	1.	4.
SEP.	83.	10.	0.	1.	1.	14.
OCT.	98.	27.	0.	0.	5.	11.
NOV.	116.	16.	0.	0.	1.	1.
DEC.	75.	5.	0.	1.	1.	5.
TOTAL	776.	72.	0.	8.	12.	48.
PERCENT	84.6	7.9	0.0	0.9	1.3	5.3

TABLE 7.

SPECIES COMPOSITION

CANADA MAR.AND QUE.		GEAR LONGLINE		DIVISION 4W YEAR 1969		
LANDINGS FROM TRIPS WHEN HALIBUT MAIN SPECIES CAUGHT						
MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	9.	1.	0.	20.	0.	5.
FEB.	20.	1.	0.	36.	0.	16.
MAR.	16.	0.	0.	42.	0.	14.
APR.	61.	7.	0.	65.	0.	89.
MAY	32.	1.	0.	29.	0.	77.
JUNE	43.	0.	0.	26.	0.	74.
JULY	4.	0.	0.	32.	0.	9.
AUG.	2.	0.	0.	23.	0.	7.
SEP.	0.	0.	0.	18.	0.	3.
OCT.	0.	0.	0.	0.	0.	0.
NOV.	0.	0.	0.	0.	0.	0.
DEC.	0.	0.	0.	0.	0.	0.
TOTAL	189.	11.	0.	291.	0.	245.
PERCENT	25.6	1.5	0.0	39.6	0.0	33.3

TABLE 8.

SPECIES COMPOSITION

CANADA MAR.AND QUE.		GEAR DANISH SEINE		DIVISION 4W YEAR 1969		
LANDINGS FROM TRIPS WHEN FLOUNDERS MAIN SPECIES CAUGHT						
MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	0.	0.	0.	0.	13.	2.
FEB.	0.	0.	0.	0.	17.	1.
MAR.	0.	2.	0.	1.	80.	14.
APR.	5.	13.	0.	1.	164.	16.
MAY	4.	23.	0.	0.	239.	20.
JUNE	2.	0.	0.	0.	127.	12.
JULY	0.	0.	0.	0.	27.	0.
AUG.	0.	0.	0.	0.	17.	0.
SEP.	0.	0.	0.	0.	24.	1.
OCT.	1.	0.	0.	0.	54.	5.
NOV.	0.	0.	0.	0.	24.	1.
DEC.	0.	0.	0.	0.	8.	1.
TOTAL	13.	40.	0.	3.	794.	72.
PERCENT	1.4	4.3	0.0	0.3	86.2	7.8

TABLE 9.

SPECIES COMPOSITION

CANADA MAR.AND QUE.		GEAR OTTER TRAWL		DIVISION 4VS YEAR 1969		
LANDINGS FROM TRIPS WHEN COD MAIN SPECIES CAUGHT						
MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	773.	22.	24.	1.	276.	23.
FEB.	279.	42.	16.	1.	122.	10.
MAR.	65.	0.	0.	0.	0.	0.
APR.	164.	63.	1.	3.	82.	11.
MAY	44.	0.	3.	0.	5.	0.
JUNE	16.	0.	2.	0.	0.	1.
JULY	27.	0.	0.	0.	1.	0.
AUG.	0.	0.	0.	0.	0.	0.
SEP.	0.	0.	0.	0.	0.	0.
OCT.	0.	0.	0.	0.	0.	0.
NOV.	0.	0.	0.	0.	0.	0.
DEC.	7.	0.	0.	0.	2.	0.
TOTAL	1375.	128.	45.	5.	488.	45.
PERCENT	65.9	6.1	2.2	0.2	23.4	2.2

TABLE 10.

SPECIES COMPOSITION

CANADA MAR. AND QUE. GEAR OTTER TRAWL DIVISION 4VS YEAR 1969

LANDINGS FROM TRIPS WHEN HADDOCK MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	0.	0.	0.	0.	0.	0.
FEB.	0.	0.	0.	0.	0.	0.
MAR.	27.	44.	6.	1.	17.	5.
APR.	89.	120.	7.	3.	32.	13.
MAY	0.	0.	0.	0.	0.	0.
JUNE	0.	0.	0.	0.	0.	0.
JULY	0.	0.	0.	0.	0.	0.
AUG.	0.	0.	0.	0.	0.	0.
SEP.	0.	0.	0.	0.	0.	0.
OCT.	0.	0.	0.	0.	0.	0.
NOV.	7.	23.	4.	1.	14.	1.
DEC.	1.	13.	2.	0.	4.	3.
TOTAL	123.	201.	18.	5.	67.	22.
PERCENT	28.3	46.0	4.2	1.1	15.4	5.1

TABLE 11.

SPECIES COMPOSITION

CANADA MAR. AND QUE. GEAR OTTER TRAWL DIVISION 4VS YEAR 1969

LANDINGS FROM TRIPS WHEN REDFISH MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	0.	0.	0.	0.	0.	0.
FEB.	7.	0.	19.	0.	17.	2.
MAR.	0.	0.	77.	0.	0.	1.
APR.	0.	0.	7.	0.	5.	0.
MAY	33.	0.	71.	0.	23.	2.
JUNE	9.	0.	194.	0.	2.	0.
JULY	4.	0.	28.	0.	13.	7.
AUG.	43.	0.	108.	0.	5.	8.
SEP.	0.	0.	0.	0.	0.	0.
OCT.	0.	0.	0.	0.	0.	0.
NOV.	4.	0.	24.	0.	28.	0.
DEC.	21.	0.	27.	0.	22.	0.
TOTAL	121.	0.	556.	0.	115.	21.
PERCENT	14.9	0.0	68.3	0.0	14.1	2.6

TABLE 12.

SPECIES COMPOSITION

CANADA MAR. AND QUE. GEAR OTTER TRAWL DIVISION 4VS YEAR 1969

LANDINGS FROM TRIPS WHEN FLOUNDERS MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	494.	7.	79.	1.	1299.	17.
FEB.	302.	19.	100.	1.	1252.	18.
MAR.	55.	11.	33.	1.	335.	3.
APR.	180.	47.	19.	1.	347.	14.
MAY	192.	130.	18.	1.	1163.	61.
JUNE	8.	4.	0.	0.	426.	35.
JULY	33.	12.	8.	0.	521.	50.
AUG.	47.	5.	4.	0.	374.	44.
SEP.	1.	0.	10.	0.	63.	1.
OCT.	16.	8.	4.	0.	139.	1.
NOV.	42.	18.	36.	1.	958.	27.
DEC.	188.	71.	78.	1.	1065.	45.
TOTAL	1557.	331.	389.	6.	7892.	318.
PERCENT	14.8	3.2	3.7	0.1	75.2	3.0

SPECIES COMPOSITION

TABLE 13.

CANADA MAR. AND QUE.		GEAR LONGLINE		DIVISION 4VS		YEAR 1969	
LANDINGS FROM TRIPS WHEN HALIBUT MAIN SPECIES CAUGHT							
MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS	
JAN.	5.	0.	0.	17.	0.	9.	
FEB.	6.	0.	0.	31.	0.	13.	
MAR.	22.	1.	0.	34.	0.	11.	
APR.	6.	0.	0.	10.	0.	13.	
MAY	3.	0.	0.	4.	0.	5.	
JUNE	0.	0.	0.	0.	0.	0.	
JULY	1.	0.	0.	5.	0.	1.	
AUG.	2.	0.	0.	7.	0.	0.	
SEP.	0.	0.	0.	0.	0.	0.	
OCT.	0.	0.	0.	0.	0.	0.	
NOV.	0.	0.	0.	0.	0.	0.	
DEC.	0.	0.	0.	0.	0.	0.	
TOTAL	44.	1.	0.	108.	0.	54.	
PERCENT	21.2	0.7	0.0	52.2	0.0	25.8	

TABLE 14.

SPECIES COMPOSITION

CANADA MAR. AND QUE. GEAR DANISH SEINE DIVISION 4VS YEAR 1969
 LANDINGS FROM TRIPS WHEN FLOUNDERS MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS	
JAN.	1.	0.	0.	0.	2.	0.	
FEB.	0.	0.	0.	0.	0.	0.	
MAR.	0.	0.	0.	0.	0.	0.	
APR.	0.	0.	0.	0.	0.	0.	
MAY	5.	0.	0.	0.	22.	0.	
JUNE	1.	0.	0.	0.	31.	0.	
JULY	0.	0.	0.	0.	0.	0.	
AUG.	0.	0.	0.	0.	14.	0.	
SEP.	0.	0.	0.	0.	0.	0.	
OCT.	0.	0.	0.	0.	0.	0.	
NOV.	0.	0.	0.	0.	0.	0.	
DEC.	0.	0.	0.	0.	0.	0.	
TOTAL	7.	0.	0.	0.	69.	1.	
PERCENT	9.5	0.1	0.0	0.0	89.6	0.8	

TABLE 15.

SPECIES COMPOSITION

CANADA MAR. AND QUE. GEAR OTTER TRAWL DIVISION 4VN YEAR 1969
 LANDINGS FROM TRIPS WHEN COD MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS	
JAN.	773.	1.	7.	0.	28.	10.	
FEB.	1527.	10.	22.	1.	164.	16.	
MAR.	839.	6.	59.	0.	86.	4.	
APR.	156.	2.	60.	0.	52.	1.	
MAY	847.	18.	55.	1.	156.	24.	
JUNE	393.	1.	29.	1.	50.	8.	
JULY	51.	0.	0.	0.	5.	2.	
AUG.	70.	0.	31.	0.	1.	4.	
SEP.	897.	5.	10.	1.	45.	6.	
OCT.	48.	0.	11.	0.	11.	1.	
NOV.	31.	0.	5.	0.	3.	1.	
DEC.	181.	0.	7.	0.	93.	3.	
TOTAL	5813.	43.	296.	4.	691.	80.	
PERCENT	83.9	0.6	4.3	0.1	10.0	1.2	

- 7 -
SPECIES COMPOSITION

TABLE 16.

CANADA MAR. AND QUE. GEAR OTTER TRAWL DIVISION 4VN YEAR 1969

LANDINGS FROM TRIPS WHEN REDFISH MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	0.	0.	0.	0.	0.	0.
FEB.	0.	0.	0.	0.	0.	0.
MAR.	8.	0.	23.	0.	9.	0.
APR.	0.	0.	0.	0.	0.	0.
MAY	160.	1.	361.	0.	66.	8.
JUNE	51.	0.	399.	0.	19.	19.
JULY	3.	0.	639.	0.	4.	19.
AUG.	39.	0.	215.	0.	4.	6.
SEP.	0.	0.	53.	0.	0.	0.
OCT.	58.	0.	196.	0.	33.	3.
NOV.	72.	0.	182.	0.	62.	6.
DEC.	57.	4.	390.	1.	53.	12.
TOTAL	458.	5.	2458.	2.	251.	73.
PERCENT	14.1	0.2	75.7	0.1	7.7	2.3

SPECIES COMPOSITION

TABLE 17.

CANADA MAR. AND QUE. GEAR OTTER TRAWL DIVISION 4VN YEAR 1969

LANDINGS FROM TRIPS WHEN FLOUNDERS MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	118.	10.	11.	0.	379.	1.
FEB.	83.	1.	21.	0.	451.	2.
MAR.	58.	0.	51.	0.	328.	22.
APR.	120.	0.	10.	1.	130.	5.
MAY	50.	1.	16.	0.	69.	2.
JUNE	16.	0.	3.	0.	36.	2.
JULY	0.	0.	0.	0.	0.	0.
AUG.	0.	1.	0.	0.	2.	0.
SEP.	0.	0.	0.	0.	0.	0.
OCT.	33.	0.	7.	0.	42.	1.
NOV.	8.	0.	5.	0.	18.	0.
DEC.	77.	0.	13.	0.	239.	2.
TOTAL	564.	13.	135.	1.	1694.	37.
PERCENT	23.1	0.5	5.5	0.0	69.3	1.5

SPECIES COMPOSITION

TABLE 18.

CANADA MAR. AND QUE. GEAR LONGLINE DIVISION 4VN YEAR 1969

LANDINGS FROM TRIPS WHEN COD MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	239.	0.	0.	0.	0.	0.
FEB.	19.	0.	0.	0.	0.	0.
MAR.	42.	0.	0.	0.	0.	0.
APR.	159.	0.	0.	1.	2.	2.
MAY	237.	0.	0.	0.	6.	1.
JUNE	235.	1.	0.	0.	5.	7.
JULY	29.	0.	0.	0.	1.	2.
AUG.	25.	0.	0.	0.	5.	1.
SEP.	67.	1.	0.	0.	8.	2.
OCT.	137.	3.	0.	0.	5.	5.
NOV.	484.	14.	0.	0.	6.	15.
DEC.	341.	7.	0.	0.	0.	12.
TOTAL	2013.	26.	0.	1.	39.	47.
PERCENT	94.6	1.2	0.0	0.1	1.8	2.2

TABLE 19.

SPECIES COMPOSITION

CANADA MAR. AND QUE. GEAR DANISH SEINE DIVISION 4VN YEAR 1969

LANDINGS FROM TRIPS WHEN FLOUNDERS MAIN SPECIES CAUGHT

MONTH	COD	HADDOCK	REDFISH	HALIBUT	FLOUNDERS	OTHERS
JAN.	0.	0.	0.	0.	0.	0.
FEB.	0.	0.	0.	0.	0.	0.
MAR.	0.	0.	0.	0.	0.	0.
APR.	25.	4.	0.	0.	176.	1.
MAY	55.	19.	0.	0.	454.	2.
JUNE	9.	1.	0.	0.	213.	0.
JULY	1.	0.	0.	0.	37.	0.
AUG.	2.	0.	0.	0.	123.	0.
SEP.	0.	0.	0.	1.	124.	1.
OCT.	2.	0.	0.	0.	71.	0.
NOV.	1.	0.	0.	0.	70.	0.
DEC.	7.	0.	0.	0.	64.	1.
TOTAL	102.	24.	0.	1.	1333.	6.
PERCENT	6.9	1.6	0.0	0.1	90.9	0.4

Table 20. Summary of significant species mixture in Canadian landings from ICNAF Divisions 4V and 4W.

Table #	ICNAF Div.	Gear	Main species	Significant other species
1	4W	otter trawl	cod	haddock, flounders & others
2			haddock	cod and flounders
3			redfish	none
4			flounder	some cod and haddock
5			others (pollock)	cod and haddock
6	4W	longline	cod	few haddock
7			halibut	cod and others
8	4W	Danish seine	flounders	few others
9	4Vs	otter trawl	cod	flounders
10			haddock	cod and flounders
11			redfish	cod and flounders
12			flounders	cod
13	4Vs	longline	halibut	cod and others
14	4Vs	Danish seine	flounders	cod
15	4Vn	otter trawl	cod	flounders, some redfish
16			redfish	cod and flounders
17			flounders	cod
8	4Vn	longline	cod	none
19	4Vn	Danish seine	flounders	some cod

