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Provisional List of Sampling Data for 1977

by

Assistant Executive Secretary

1. Data Reported for 1977

The appended tables contain provisional lists of 1977 sampling data available at the Secretariat. Data relevant to commercial fisheries are arranged by species in Tables 1 to 18, and Table 19 contains data relevant to research vessel surveys. The format of presentation is the same as used in recent Sampling Yearbooks, and the abbreviations for gears generally conform with those adopted for use by STACRES. Where sampling data have been reported by sex, the entries under "Number measured" and "Number aged" indicate the numbers of males and females. Entries under "Age samples" indicate the availability of quarterly age-length keys which pertain to the monthly length composition data.

2. Apparent Deficiencies in 1977 Data

This advance release of 1977 sampling data should be carefully checked by national scientists against data available in their files and the Secretariat promptly informed of any errors or omissions. Any additional data for 1977 (and earlier years), not yet reported, should be forwarded to the Secretariat as soon as possible, so that *Sampling Yearbook* Vol. 22 (to be issued in the autumn of 1979) will contain a complete listing of all available data for 1977, especially data pertaining to commercial fisheries. Some notable omissions from this 1977 list of data are as follows:

Canada (M)	- Atlantic mackerel and Squid- <i>Illex</i>
Canada (N)	- Atlantic herring (1975-77) and Squid- <i>Illex</i>
Cuba	- No commercial data (research vessel data only)
Denmark (G)	- No commercial data for Atlantic redfish and Greenland halibut
France (SP)	- No commercial data (research vessel data only)
Fed. Rep. Germany	- Squid- <i>Illex</i>
German Dem. Rep.	- Atlantic mackerel
Poland	- Atlantic redfish, capelin and Atlantic mackerel
Portugal	- No otter trawl samples (gillnet catches only)
Spain	- Squid- <i>Illex</i>
USSR	- No data for Subareas 5 and 6

No sampling data were reported by Denmark (F), France (M), Iceland, Japan, Romania and USA. Very little or no data were reported by countries which fished in Subareas 5 and 6. Also, much of the sampling data included in Tables 1 to 19 are incomplete due to the absence of relevant age-length keys.

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3. Availability of Sampling Data

All available sampling data for 1972-77 have been computerized to provide for rapid retrieval on computer printouts to meet specific requests. Copies of length frequency data and age-length keys (if available) will be forwarded upon request to institutes and/or individual scientists involved in the Commission's work. All requests should specify the actual data required, indicating at least the species, country and division.

LIST OF SAMPLING DATA FOR 1977

1. Sampling Data Pertaining to Commercial Fisheries

The following summary of sampling data available at the Secretariat is a listing by country, species and division of samples tabulated by species in Tables 1 to 18. Nearly all of these data were reported as commercial samples, as indicated by the abbreviations CL (commercial landings) and CC (commercial catches) in the tables under "Type of Sample". However, a few samples labelled as RC (research catches) have been included, where the type of gear used or the gear size reported indicated that they were relevant to commercial fishing operations. The procedure followed in preparing this 1977 list of sampling data is essentially the same as that used for 1976 data (*Sampling Yearbook* Vol. 21).

Country	Species	Divisions
Bulgaria	Silver hake	4W
	Atlantic mackerel	5
	Capelin	4W
	Squid- <i>Illex</i>	4X
Canada (M)	Atlantic cod	3L, 3Ps, 4R, 4S, 4T, 4Vn, 4Vs, 4W, 4X, 5Ze
	Haddock	3Ps, 4W, 4X, 5Ze
	Atlantic redfish	2J, 3L, 3M, 3O, 3Pn, 3Ps, 4R, 4S, 4T, 4Vn, 4Vs, 4W, 4X
	Pollock	4Vs, 4W, 4X, 5Ze
	American plaice	4R, 4S, 4T, 4Vn, 4Vs, 4W, 4X
	Witch flounder	3K, 4R, 4T, 4Vn, 4Vs, 4W, 4X
	Yellowtail flounder	4Vs
	Winter flounder	4T, 4X
	White hake	3Ps, 4R, 4T, 4Vn, 4Vs, 4X
	Atlantic herring	4Vn, 4W, 4X, 5Y, 5Z
Canada (N)	Atlantic cod	2H, 2J, 3K, 3L, 3M, 3N, 3O, 3Pn, 3Ps, 4R
	Haddock	3Ps
	Atlantic redfish	2H, 2J, 3K, 3L, 3M, 3N, 3O, 3Pn, 3Ps, 4R
	American plaice	3K, 3L, 3N, 3O, 3Ps
	Witch flounder	3K, 3L, 3N, 3O, 3Ps, 4R, 4S
	Yellowtail flounder	3L, 3N, 3O, 3Ps
	Greenland halibut	2H, 2J, 3K, 3L, 4R
	Atlantic mackerel	3K, 3L, 4R, 4T
	Capelin	2J, 3K, 3L, 3N, 3O, 3P, 4R, 4S
Cuba	Silver hake	4VWX
	Squid- <i>Illex</i>	4VWX
Denmark (G)	Atlantic cod	1B, 1D, 1E, 1F
	Greenland cod	1B, 1D
France (SP)	Atlantic cod	4R
	Squid- <i>Illex</i>	3Ps
Fed. Rep. Germany	Atlantic cod	EG, 1F, 2J, 3K
	Atlantic redfish	2J, 3K
German Dem. Rep.	Atlantic cod	2J, 3K
	Greenland halibut	2G, 2H
	Capelin	3K
Italy	Squid- <i>Illex</i>	3L
Norway	Capelin	3N
Poland	Atlantic cod	2J, 3K
	Witch flounder	3K
	Greenland halibut	2J, 3K
	Atlantic herring	5Ze
	Squid- <i>Illex</i>	4W, 5Z

Country	Species	Divisions
Portugal	Atlantic cod	1B, 1C, 1D, 3L, 3N, 3O
	Greenland cod	1B, 1C, 1D
Spain	Atlantic cod	3L, 3M, 3N, 3O
	Atlantic redfish	3L, 3M
	American plaice	3L, 3N, 3O
	Yellowtail flounder	3N, 3O
USSR	Atlantic cod	2J, 3M, 4W
	Atlantic redfish	3K, 3L, 3M, 4W
	Silver hake	4W
	American plaice	3L
	Witch flounder	3K
	Greenland halibut	OB, 1C, 2J
	Roundnose grenadier	3K
	Atlantic mackerel	4W
	Atlantic argentine	4W
	Capelin	2J, 3K
	Squid- <i>Illex</i>	4W
UK	Atlantic cod	3K, 3M

2. Sampling Data from Research Vessel Surveys

The following summary of research sampling data available at the Secretariat is a listing by country, species and division of samples tabulated by species in Table 19. All of these samples were reported as research samples, as indicated by the abbreviation RC (research catches) under "Type of sample".

Country	Species	Divisions
Cuba	Atlantic cod	4VWX
	Haddock	4VWX
	Atlantic redfish	4VWX
	Atlantic argentine	4VWX
Denmark (G)	Atlantic cod	1B, 1D, 1F
	Atlantic redfish	1A, 1B, 1C, 1D, 1E
	American plaice	1A, 1B, 1C, 1D, 1E
	Greenland halibut	1A, 1B, 1C, 1D, 1E
	Greenland cod	1D, 1E
	Striped wolffish	1B
France (SP)	Atlantic cod	2J, 3K, 3L, 3Pn, 3Ps, 4R
	Atlantic redfish	3K, 3Pn, 3Ps, 4R
	American plaice	3K, 3Ps
	Greenland halibut	OB
Fed. Rep. Germany	Atlantic cod	1D, 1E, 1F, 2J

Table 1. Atlantic cod length and age sampling data for 1977

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M)	3L	OTB	Jul	CL	1	300	1	40
	3Ps	OTB	Jun	CL	2	613	2	70
			Aug	CL	1	203	1	33
			Oct	CL	1	182	1	35
	4R	OTB	Feb	CL	6	1752	9	454
			Mar	CL	3	899		
			Apr	CL	4	1303	10	543
			May	CL	6	1827		
			Jun	CL	1	200		
	4S	OTB	Apr	CL	1	353	1	67
			Jul	CL	1	200	2	91
			Aug	CL	1	200		
	4T	OTB	May	CL	4	813	10	360
			Jun	CL	6	1204		
			Jul	CL	1	200	2	51
			Sep	CL	1	200		
			Oct	CL	2	400	5	168
			Nov	CL	3	605		
		SN	May	CL	1	200	5	186
			Jun	CL	4	812		
			Jul	CL	6	1200	30	1033
			Aug	CL	16	3247		
			Sep	CL	8	1617		
		GN	Jun	CL	3	627	3	125
			Jul	CL	1	200		
			Aug	CL	1	200	3	133
			Sep	CL	1	200		
		LHP	Jun	CL	2	401	2	76
			Jul	CL	6	1070		
			Aug	CL	7	1400	13	516
	4Vn	OTB	Jan	CL	1	290	5	240
			Feb	CL	1	264		
			Mar	CL	3	910		
			Aug	CL	1	238	1	26
			Nov	CL	1	245	6	233
			Dec	CL	5	1455		
		SN	May	CL	1	300	2	99
			Jun	CL	1	197		
			Aug	CL	2	586	2	71
	4Vs	OTB	Feb	CL	2	484	6	316
			Mar	CL	4	1128		
			Jul	CL	1	238	2	81
			Sep	CL	1	300		
	4W	OTB	Mar	CL	4	1156	4	210
			Oct	CL	1	200	2	78
			Dec	CL	1	232		
		LL	Mar	CL	1	290	1	54
			Apr	CL	1	239	2	93
			Jun	CL	1	213		
	4X	OTB	Feb	CL	1	201	2	109
			Mar	CL	1	198		
			Sep	CL	4	743	4	142
			Nov	CL	1	227	2	112
			Dec	CL	1	253		
		LL	Jan	CL	1	276	3	181
			Feb	CL	1	271		
			Mar	CL	1	256		

Table 1. Atlantic cod (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M) (cont'd)	4X	LL	Apr	CL	1	172	1	60
			Jul	CL	2	541	3	193
			Sep	CL	1	251		
			Dec	CL	1	237	1	66
	5Ze	OTB	Feb	CL	1	124	1	49
			Jun	CL	3	896	3	106
			Jul	CL	7	2049		
			Aug	CL	1	300	8	308
Canada (N)	2H	OTB	Aug	CL	4	379	-	-
	2J	OTB	Jul	CL	6	523	-	-
		GN	Aug	CL	7	776	-	643 ¹
		LHP	Aug	CL	6	410	-	643 ¹
		FPN	Aug	CL	9	2789	-	643 ¹
	3K	OTB	Feb	CL	1	369		
			Mar	CL	5	2267	-	349
			Apr	CL	3	1131	-	377
			Oct	CL	1	478	-	66
		GN	Jul	CL	19	3066	-	1077 ²
			Oct	CL	1	211	-	358 ³
			Sep	CL	3	849	-	358 ³
		FPN	Jun	CL	2	656		
			Jul	CL	13	5594	-	1077 ²
	3L	OTB	Feb	CL	2	907	-	262
			May	CL	3	1201	-	457
			Jun	CL	2	589		
			Jul	CL	1	659		
			Aug	CL	3	1358	-	495
			Sep	CL	4	1532		
			Oct	CL	1	248		
			Nov	CL	4	1204	-	363
			Dec	CL	2	1141		
		GN	Jun	CL	5	1322	-	1273 ⁴
			Jul	CL	4	524	-	250 ⁵
			Sep	CL	3	152	-	250 ⁵
		LL	Sep	CL	2	369	-	250 ⁵
		LHP	Jun	CL	5	1773	-	1273 ⁴
			Jul	CL	2	544	-	250 ⁵
			Sep	CL	7	951	-	250 ⁵
		FPN	May	CL	3	1655	-	149
			Jun	CL	14	4912		
			Jul	CL	10	2635	-	1273 ⁴
			Aug	CL	1	513		
	3M	OTB	Oct	CL	1	607	-	201
			Nov	CL	2	1139		
	3N	OTB	Jun	CL	2	1679	-	272
			Jul	CL	1	366	-	103
			Sep	CL	1	233		
	3O	OTB	May	CL	1	683	-	238
			Jun	CL	2	1108	-	60
			Nov	CL	1	582		
	3Pn	OTB	Mar	CL	3	1586	-	215
		LL	Mar	CL	8	3979	-	438
	3Ps	OTB	May	CL	3	1640	-	386
			Jun	CL	1	337		

Table 1. Atlantic cod (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (N) (cont'd)	3Ps	OTB	Nov	CL	3	1609	}	-
			Dec	CL	3	1666		
		GN	Jun	CL	6	1394	}	-
			Jul	CL	4	989		
		LL	Sep	CL	8	2072	}	-
			Oct	CL	3	1234		
		FPN	Jun	CL	3	1234	-	436 ⁶
	4R	OTB	Jan	CL	3	2124	}	-
			Feb	CL	2	1148		
			Apr	CL	3	1390		
			May	CL	1	624		
			Jun	CL	5	2295		
			Sep	CL	5	1121		
		GN	Jun	CL	8	3139	}	-
			Sep	CL	9	1241		
			Oct	CL	1	155		
		FPN	Jun	CL	3	1419	-	508 ⁷
Denmark (G)	1B	FPN	Jun	CL	3	1399	1	216
			Jul	CL	1	274	-	-
	1D	OTB	Feb	CL	1	1307	2	284 ⁸
			Jun	CC	1	42	1	42
			Oct	RC	5	206	}	5
			Nov	RC	1	30		
		FPN	May	CC	2	169	}	2
			Jun	CC	2	2523		
		LHP	Oct	RC	5	687	}	7
			Nov	RC	3	268		
	1E	OTB	Mar	CL	1	1170	2	284 ⁸
			Jun	CL	1	1033	1	228
	1F	OTB	Jul	CL	1	965	}	1
			Aug	CL	1	1210		
France (SP)	4R	OTB	Jan	RC	1	274	1	188
Fed. Rep. Germany EG ⁹	OTB		Feb	CL	1	330	}	2
			Mar	CL	2	640		
			Apr	CL	2	661	}	3
			May	CL	1	451		
			Jul	CL	3	778	}	3
			Aug	CL	2	482		
			Oct	CL	2	948	}	3
			Nov	CL	1	372		
	1F	OTB	Jan	CL	4	1843	6	452
	2J	OTB	Jan	CC	22	14832	}	13
			Feb	CC	7	4661		
			Mar	CC	1	103		
	3K	OTB	Feb	CC	2	498	13	633 ¹⁰
German Dem. Rep.	2J	OTB	Feb	CC	1	142	1	142
	3K	OTB	Feb	CC	1	33	1	33
Poland	2J	OTB	Jan	CC	-	9890	}	-
			Feb	CC	-	6466		
	3K	OTB	Feb	CC	-	1543	-	154

Table 1. Atlantic cod (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Portugal	1B	GN	Jul	CC	5	248	-	-
	1C	GN	Jun	CC	4	204	-	-
			Jul	CC	5	294	-	-
	1D	GN	Jun	CC	2	73	-	-
	3L	GN	Jul	CC	4	379	15	202
			Aug	CC	11	1144		
	3N	GN	Aug	CC	4	215	5	251
			Sep	CC	6	884		
	3O	GN	Aug	CC	2	82	2	84
			Sep	CC	1	103		
Spain	3L	PTB	Feb	CC	4	1362	17	870
			Mar	CC	14	5290		
			Apr	CL	19	7924	19	882
			May	CL	1	284		
			Jul	CC	2	1139	2	107
	3M	PTB	Apr	CC	5	1762	5	220
	3N	PTB	Jun	CC	19	9671	23	1300
			Jul	CC	18	9017	11	488
	3O	PTB	Mar	CC	2	377	2	175
			Jun	CC	2	545	2	115
USSR	2J	OTB	Jan	CC	42	14084	4	1198
			Feb	CC	2	1150		
	3M	OTB	Mar	CC	14	3899	-	-
	4W	OTB	Jul	CC	8	1590	-	-
UK	3K	OTB	Feb	CL	1	222	-	-
	3M	OTB	May	CL	1	616	-	-

- ¹ Same age-length key used for GN, LHP and FPN in Div. 2J.
- ² Same age-length key used for GN and FPN in Div. 3K.
- ³ Same age-length key used for LL and LHP in Div. 3K.
- ⁴ Same age-length key used for GN and LHP in Div. 3L.
- ⁵ Same age-length key used for GN, LL and LHP in Div. 3L.
- ⁶ Same age-length key used for GN and FPN in Div. 3Ps.
- ⁷ Same age-length key used for GN and FPN in Div. 4R.
- ⁸ Same age-length key used for OTB in Div. 1D and 1E.
- ⁹ East Greenland.
- ¹⁰ Same age-length key used for OTB in Div. 2J and 3K.

Table 2. Haddock length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M)	3Ps	OTB	Mar	CL	1	206	1	46
			Oct	CL	1	216	1	42
	4W	OTB	Jan	CL	1	202	1	33
			Apr	CL	1	200		
			May	CL	1	214	2	72
			Aug	CL	1	200		
			Sep	CL	3	605	4	122
			Oct	CL	1	215		
			Nov	CL	2	462	7	197
			Dec	CL	4	937		

Table 2. Haddock (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
	4X	SN	Apr	CL	1	191	1	33
		LL	Mar	CL	1	234	1	37
			Apr	CL	1	260	2	65
			Jun	CL	1	200		
		OTB	Jan	CL	5	1050	43	1396
			Feb	CL	18	4052		
			Mar	CL	20	4149		
			Apr	CL	4	882		
			May	CL	3	722	13	431
			Jun	CL	6	1373		
			Aug	CL	2	400	8	236
			Sep	CL	6	1200		
			Oct	CL	3	600	7	212
			Nov	CL	3	622		
			Dec	CL	1	192		
		LL	Jan	CL	2	456	3	111
			Mar	CL	1	196		
			May	CL	1	109	1	35
			Jul	CL	1	200	3	114
			Aug	CL	2	407		
			Dec	CL	1	163	1	28
		LHP	Jul	CL	1	200	1	33
	5Ze	OTB	Jan	CL	1	236	1	40
			Jun	CL	2	427	2	71
			Jul	CL	4	809	8	239
			Aug	CL	4	800		
Canada (N)	3Ps	OTB	Apr	CL	2	687	-	-
			May	CL	3	1039		
			Oct	CL	1	426		
			Nov	CL	3	1308		
USSR	4W	OTB	Jul	CC	13	2564	-	-
			Aug	CC	1	199		

Table 3. Atlantic redfish length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M)	2J	OTB	Feb	CL	1	116/75		
			Sep	CL	2	199/201		
	3L	OTB	Aug	CL	2	219/181		
			Oct	CL	1	87/113		
	3M	OTB	Jun	CL	2	153/247		
		OTM	Jun	CL	1	149/51		
			Jul	CL	1	117/83		
	3O	OTB	Jun	CL	1	74/127		
	3Pn	OTM	Mar	CL	1	85/116		
	3Ps	OTB	Mar	CL	1	61/139		
			Jul	CL	1	132/68		
			Aug	CL	2	165/231		
			Sep	CL	4	366/449		
			Oct	CL	2	195/218		
			Nov	CL	1	103/97		
			Dec	CL	1	81/119		
		OTM	Jun	CL	1	133/67		

Table 3. Atlantic redfish (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
	4R	OTB	Feb	CL	3	319/289		
			Mar	CL	1	73/91		
			Jun	CL	3	265/320		
			Jul	CL	4	414/364		
			Aug	CL	6	858/318		
	4S	OTM	Jun	CL	3	356/243		
		OTB	Apr	CL	1	91/109		
			Jun	CL	2	148/252		
			Jul	CL	10	727/1273		
			Aug	CL	6	436/764		
			Sep	CL	9	703/1097		
		OTM	Jul	CL	1	82/163		
			Aug	CL	1	130/70		
			Sep	CL	3	288/312		
	4T	OTB	Jun	CL	3	286/245		
			Jul	CL	1	49/151		
			Aug	CL	2	155/245		
			Sep	CL	1	66/134		
	4Vn	OTM	Jun	CL	3	242/358		
		OTB	Mar	CL	3	287/315		
			Aug	CL	3	376/225		
			Sep	CL	1	100/100		
			Oct	CL	1	89/117		
		OTM	Sep	CL	1	102/98		
	4Vs	OTB	Mar	CL	3	287/410		
			May	CL	1	61/138		
			Sep	CL	4	363/437		
			Oct	CL	1	107/93		
		OTM	Sep	CL	2	225/175		
	4W	OTB	Mar	CL	1	75/122		
			May	CL	1	133/67		
			Jun	CL	1	102/99		
			Jul	CL	1	62/138		
			Aug	CL	2	176/224		
			Sep	CL	1	84/116		
			Oct	CL	1	87/113		
	4X	OTB	Jun	CL	2	144/257		
Canada (N)	2H	OTB	Sep	CL	2	618/341		
	2J	OTB	Sep	CL	2	473/378		
			Oct	CL	1	253/304		
	3K	OTB	Feb	CL	1	105/297		
			Mar	CL	3	648/566		
			May	CL	1	155/210		
			Jul	CL	1	44/169		
			Sep	CL	1	347/225		
	3L	OTB	Jun	CL	1	186/168		
			Aug	CL	2	501/534		
			Sep	CL	2	539/445		
			Oct	CL	6	1009/1430		
			Nov	CL	2	365/663		
			Dec	CL	1	140/244		
		OTM	Jun	CL	2	299/446		
			Jul	CL	2	417/593		
			Aug	CL	1	240/312		
			Oct	CL	1	46/258		

Table 3. Atlantic redfish (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
	3M	OTM	Jun	CL	3	702/801		
			Jul	CL	4	816/1091		
			Aug	CL	2	357/514		
	3N	OTM	Aug	CL	1	152/249		
	3O	OTB	Mar	CL	1	156/283		
			Aug	CL	1	514/498		
			Sep	CL	3	1012/1316		
	3Pn	OTB	Mar	CL	1	127/277		
			Aug	CL	2	485/388		
			Sep	CL	1	194/280		
	3Ps	OTB	Mar	CL	1	84/148		
			May	CL	1	254/388		
			Aug	CL	1	349/322		
			Sep	CL	3	367/490		
			Nov	CL	2	657/720		
		OTM	Aug	CL	2	502/245		
			Nov	CL	1	180/249		
	4R	OTB	Feb	CL	1	154/195		
Fed. Rep. Germany	2J	OTB	Jan	CC	5	968/1451	7	201/231
			Feb	CC	1	324/745		
	3K	OTB	Feb	CC	1	160/282		
Spain	3L	PTB	Mar	CC	1	63/235		
			Apr	CC	6	557/631		
	3M	PTB	Apr	CC	1	145/119		
USSR	3K	OTB	Jul	CC	-	463/484	-	-
	3L	OTB	Feb	CC	-	2996/3682	1	124/164
	3M	OTB	Jan	CC	-	2303/2225	1	167/129
			Apr	CC	-	596/1317	2	146/313
	4W	OTB	Aug	CC	2	400		
			Sep	CC	4	786		

Table 4. Silver hake length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Bulgaria	4W	OTM	Jul	CC	-	200		
			Aug	CC	-	200		
Cuba	4W	OTB	Jul	RC	7	2750		
USSR	4W	OTB	Jul	CC	224	44960	-	350/350
			Aug	CC	69	13719		
			Sep	CC	42	8419		
		OTM	Jun	CC	25	5030	-	143/115
			Aug	CC	8	1600	-	-

Table 5. Pollock length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M)	4Vs	OTB	Aug	CL	1	298	2	60
			Sep	CL	1	200		
	4W	OTB	Feb	CL	1	200	4	186
			Mar	CL	2	499		
			Apr	CL	2	500		
			Jun	CL	1	300	3	147
			Jul	CL	1	299		
			Aug	CL	3	900	7	339
			Sep	CL	3	759		
			Oct	CL	2	600		
			Nov	CL	3	895	8	366
			Dec	CL	3	813		
	4X	OTB	Jan	CL	1	240	20	789
			Feb	CL	9	1863		
			Mar	CL	10	2314		
			Apr	CL	4	892	6	227
			Jun	CL	2	499		
			Aug	CL	2	494	5	154
			Sep	CL	3	570		
			Oct	CL	3	744		
			Nov	CL	1	205	5	202
			Dec	CL	1	254		
	5Ze	GN	May	CL	1	256	1	30
		OTB	Jan	CL	1	205	4	162
			Feb	CL	3	655		
			Jul	CL	1	219	1	39
			Dec	CL	1	268	1	41

Table 6. American plaice length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M)	4R	OTB	Jan	CL	1	47/143	2	14/27
			Apr	CL	1	57/143		
			May	CL	1	114/86		
	4S	OTB	Jul	CL	1	2/198	1	2/35
	4T	OTB	Jun	CL	5	198/766	4	48/103
			Jun	CL	4	204/596	4	48/87
		SN	Jul	CL	5	190/810	22	221/500
			Aug	CL	12	347/2052		
	4Vn	OTB	Sep	CL	5	204/751	2	32/44
			Jan	CL	1	57/95		
		SN	Mar	CL	1	60/140	6	72/159
			Jun	CL	6	321/879		
			Jul	CL	4	179/621		
			Aug	CL	4	197/603	10	108/245
			Sep	CL	2	70/330		
	4Vs	OTB	Feb	CL	1	54/146	2	31/55
			Mar	CL	1	48/152		
			Apr	CL	2	165/235	2	31/47
			Aug	CL	2	136/236	3	49/68
			Sep	CL	1	69/131		
		SN	Jun	CL	1	67/133	1	19/26

Table 6. American plaice (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
	4W	OTB	Mar	CL	2	109/298	2	32/67
	4X	OTB	Sep	CL	1	87/113	-	-
Canada (N)	3K	OTB	Feb	CL	3	317/1417	-	243/462
			Mar	CL	4	459/1125		
			Apr	CL	4	322/1168		
		GN	Jul	CL	8	724/1299	-	171/301
			Sep	CL	1	40/90	-	38/59
	3L	OTB	Feb	CL	1	294/289	-	108/158
			Mar	CL	1	210/381		
			May	CL	5	1668/1443		
			Jun	CL	1	764/718		
			Jul	CL	1	47/307		
			Aug	CL	5	690/968		
			Sep	CL	3	453/870		
			Oct	CL	4	735/972		
			Nov	CL	3	357/845		
			Dec	CL	2	390/438		
	3N	OTB	Jan	CL	2	248/367	-	145/216
			Mar	CL	1	91/163		
			Apr	CL	1	250/337		
			May	CL	3	681/668		
			Jul	CL	3	409/526		
			Aug	CL	4	473/625		
			Sep	CL	2	391/373		
			Oct	CL	2	370/394		
	30	OTB	May	CL	1	67/147	-	63/95
			Jun	CL	1	260/215		
			Aug	CL	2	270/354		
			Sep	CL	2	287/655		
	3Ps	OTB	Mar	CL	2	458/766	-	152/277
			Apr	CL	1	56/633		
			May	CL	2	89/783		
			Oct	CL	1	82/165		
			Nov	CL	2	371/623		
Spain	3L	PTB	Feb	CC	1	36/165		
			Mar	CC	11	1056/2140		
	3N	PTB	Mar	CC	2	182/375		
			Jun	CC	1	54/106		
	30	PTB	Mar	CC	1	64/117		
			Apr	CC	1	51/40		
USSR	3L	OTB	Jul	CC	11	3119/2672		

Table 7. Witch flounder length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M)	3K	OTB	Mar	CL	1	157/43	-	-
	4R	OTB	Feb	CL	1	35/71	1	14/20
	4T	SN	Jun	CL	1	70/130	1	15/16

Table 7. Witch flounder (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
	4Vn	OTB	Mar	CL	1	104/96	1	14/15
			May	CL	1	57/143	1	11/20
		SN	May	CL	1	49/151	3	40/63
			Jun	CL	2	100/300		
			Aug	CL	1	41/159	3	41/53
			Sep	CL	2	125/275		
	4Vs	OTB	Jan	CL	1	119/81	5	81/83
			Feb	CL	1	88/113		
			Mar	CL	3	291/309		
	4W	OTB	Feb	CL	1	69/131	2	24/36
			Mar	CL	1	50/142		
		SN	Apr	CL	2	252/148	-	-
	4X	OTB	Mar	CL	1	151/48	1	14/5
Canada (N)	3K	OTB	Feb	CL	2	1177/869	-	317/397
			Mar	CL	2	267/313		
			Apr	CL	3	619/788		
			Oct	CL	1	269/239		
		GN	Jul	CL	10	564/1330	-	202/251
	3L	OTB	Sep	CL	1	706/388	-	98/109
			Dec	CL	1	258/83	-	31/28
		GN	Sep	CL	1	57/43	-	37/36
	3N	OTB	Mar	CL	1	269/631	-	74/129
			May	CL	1	328/482		
			Jun	CL	1	200/290		
	3O	OTB	Jan	CL	1	501/295	-	335/398
			Feb	CL	4	1424/1168		
			Mar	CL	1	317/119		
			Nov	CL	1	305/530		
	3Ps	OTB	Mar	CL	1	42/67	-	26/46
			Apr	CL	3	1126/1050	-	148/197
	4R	OTB	Feb	CL	2	286/403	-	253/350
			Mar	CL	3	532/919		
	4S	OTB	Apr	CL	1	322/413	-	51/65
Poland	3K	OTB	Mar	CC	2	858/632	2	126/88
USSR	3K	OTB	Oct	CC	12	563/486	-	-

Table 8. Yellowtail flounder length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M)	4Vs	OTB	Jun	CL	3	300/300	3	39/60
			Jul	CL	1	80/120		
			Aug	CL	1	82/118	3	43/61
			Sep	CL	1	50/150		
Canada (N)	3L	OTB	May	CL	3	898/806	-	113/139
			Jun	CL	2	1343/1275		
			Jul	CL	2	500/382		
			Aug	CL	2	740/730		
			Sep	CL	1	396/300		

Table 8. Yellowtail flounder (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
	3N	OTB	Mar	CL	1	176/229	-	39/51
			Apr	CL	2	547/564		209/272
			May	CL	2	625/644		
			Jun	CL	1	287/196		
			Jul	CL	1	73/260		
			Aug	CL	2	520/847		122/162
			Sep	CL	1	155/274		
			Oct	CL	3	431/828		
			Nov	CL	7	1472/1713	-	241/303
	30	OTB	Feb	CL	1	346/345	-	40/54
			Apr	CL	2	475/707	-	61/84
			Aug	CL	1	236/156	-	57/69
			Sep	CL	1	215/182	-	
			Nov	CL	1	124/176	-	25/36
	3Ps	OTB	Mar	CL	1	412/526	-	113/142
			Apr	CL	1	248/278	-	39/48
			Nov	CL	1	99/264	-	38/49
Spain	3N	PTB	Mar	CC	3	370/598		
			Apr	CC	1	103/165		
			Jun	CC	1	29/212		
			Jul	CC	2	155/305		
	30	PTB	Mar	CC	1	118/96		
			Apr	CC	1	92/69		
			Jun	CC	1	178/141		

Table 9. Greenland halibut length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (N)	2H	OTB	Sep	CL	1	58/92	-	57/91
	2J	OTB	Sep	CL	1	23/72	-	14/46
		GN	Sep	CL	1	148/193	-	297/395
			Oct	CL	1	723/875		
	3K	OTB	Feb	CL	1	137/213	-	317/453
			Mar	CL	4	848/1096		
			Apr	CL	3	294/358		
			Sep	CL	1	44/110		
			Oct	CL	1	325/401		
		GN	Jul	CL	9	838/1224	-	196/263
			Sep	CL	7	961/1347	-	277/344
	3L	GN	Jun	CL	2	278/362	-	171/174
			Jul	CL	2	182/307		
			Aug	CL	1	127/199		
			Sep	CL	4	650/813		
			Oct	CL	1	122/188		
	4R	OTB	Mar	CL	1	29/18	-	28/18
German Dem. Rep.	2G	OTB	Sep	CC	1	127/83	1	127/83
	2H	OTB	Jun	CC	1	261/187	2	233/420
			Sep	CC	1	163/107	1	163/107
			Dec	CC	1	103/42	1	103/42

Table 9. Greenland halibut (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Poland	2J	OTB	Mar	CC	1	467/385		
	3K	OTB	Mar	CC	2	784/1033		
USSR	0B	OTB	Aug	CC	19	4225/2020		
			Sep	CC	6	1405/830		
			Oct	CC	4	835/367		
			Nov	CC	32	4937/2435		
	1C	OTB	Sep	CC	18	4298/2211		
	2J	OTB	Feb	CC	8	823/1159		

Table 10. Winter flounder length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M)	4T	OTB	Jun	CL	4	261/388	4	65/74
	4X	OTB	Sep	CL	4	387/415	4	69/87

Table 11. Greenland cod length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Denmark (G)	1B	FPN	Jun	CL	2	633	1	156
	1D	FPN	May	CL	3	1434	-	-
		GN	Oct	RC	5	71	-	-
Portugal	1B	GN	Jul	CC	2	252		
	1C	GN	Jun	CC	4	240		
			Jul	CC	5	169		
	1D	GN	Jun	CC	2	127		

Table 12. Roundnose grenadier length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
USSR	3K	OTB	Jan	CC	9	2162/1828		

Table 13. White hake length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M)	3Ps	LL	Feb	CL	1	150	2	-
			Mar	CL	1	168		
	4R	OTB	Feb	CL	2	402	1	-
	4T	OTB	Jun	CL	1	200	1	-
			Jul	CL	2	400	1	-
			Aug	CC	1	200	1	-
	4Vn	SN	Jun	CL	1	164	1	-
			Aug	CL	1	200	1	-
			Sep	CL	1	200		
	4Vs	OTB	Mar	CL	1	204	1	-
	4X	LL	May	CL	1	169	1	-

Table 14. Atlantic herring length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M)	4Vn	OTM	May	CL	3	491	3	266
			May	CL	1	159	1	57
			Nov	CL	38	6044	56	844
			Dec	CL	21	2990		
		FPN	Jun	CL	1	252	1	41
			Jan	CL	1	306	1	48
	4W	PS	Jan	CL	49	8981	48	2913
			Apr	CL	7	1210	16	835
			May	CL	12	1586		
			Nov	CL	2	372	5	136
			Dec	CL	3	503		
		4X	Jan	CL	1	273	30	1065
			Feb	CL	22	4813		
			Mar	CL	8	2239		
			May	CL	4	935		
			Jun	CL	87	18305	86	2902
			Jul	CL	40	8584	113	3315
			Aug	CL	46	9749		
			Sep	CL	33	7797		
			Oct	CL	9	2569		
			Dec	CL	2	263	9	271
		GN	May	CL	1	128	16	571
			Jun	CL	16	2649		
			Jul	CL	13	1830		
			Aug	CL	15	2950	34	1052
			Sep	CL	7	1191		
		FPN	Apr	CL	5	796	8	315
			May	CL	6	787		
			Jun	CL	5	724		
		FWR	May	CL	9	1949	49	2210
			Jun	CL	39	8117		
			Jul	CL	36	5638		
			Aug	CL	79	14165		
			Sep	CL	24	6068	138	3104
			Oct	CL	18	4971		
			Nov	CL	28	7677		
			Dec	CL	9	2011	52	1192

Table 14. Atlantic herring (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
	5Y	PS	May	CL	1	132	1	28
	5Z	PS	Sep	CL	1	841	1	32
Poland	5Ze	OTB	Feb	RC	1	1056	1	130

Table 15. Atlantic mackerel length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Bulgaria	5NK	OTM	Jan	CC	19	3860	9	1565
			Feb	CC	12	2661		
Canada (N)	3K	PS	Nov	CL	1	50	-	50
		FPN	Jul	CL	1	15	-	90
			Aug	CL	2	75		
	3L	SB	Nov	CL	1	50	-	50
		PS	Sep	CL	9	445	-	445
			Oct	CL	1	50	-	148
			Nov	CL	2	98		
		FPN	Sep	CL	6	300	-	300
	4R	GN	Jul	CL	2	90	-	89
	4T	PS	May	CL	1	50	-	50
USSR	4W	OTB	Jul	CC	13	2526	-	-
			Aug	CC	3	600		
		OTM	Jun	CC	4	792	-	-

Table 16. Atlantic argentine length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
USSR	4W	OTB	Aug	CC	6	1200	8	392
			Sep	CC	12	2375		

Table 17. Capelin length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Bulgaria	4W	OTM	May Jun	CC CC	- -	200 200		
Canada (N)	2J	OTM	Oct	RC	2	53/47	2	53/47
		DN	Jul	RC	1	49/-	1	49/-
	3K	OTM	Oct Nov	RC RC	6 10	118/182 197/303	16	316/485
		SB	Jun Jul	RC RC	1 2	48/- 78/11		
		FPN	May	RC	1	39/11	1	39/11
		CN	Jun	RC	8	394/-	8	394/-
		DN	Jun	RC	7	347/-	7	347/-
	3L	OTB	Feb Mar Apr	RC RC RC	2 1 4	38/62 34/25 95/119	3	72/84
		OTM	Mar Apr May Jun	RC RC RC RC	2 2 2 1	40/74 52/48 55/45 2/5		
		PS	May Jun	RC RC	1 10	4/46 289/211	11	293/257
		FPN	Apr Jul	RC RC	2 4	84/16 159/41		
		CN	Jul	RC	8	368/32	8	368/32
		DN	Jun Jul	RC RC	34 6	1594/106 256/44	34 6	1594/106 256/44
	3N	OTB	May Jun	RC RC	1 2	11/8 51/31	3	63/39
		OTM	Jun	RC	16	144/669		
		PS	Jun	RC	1	7/32	1	7/32
	3O	OTB	Jun	RC	2	53/62	2	53/62
	3P	OTB	Apr	RC	4	172/129	4	172/129
		OTM	Feb	RC	9	148/212	9	148/212
		SB	Jun	RC	14	627/39	14	627/39
	4R	OTB	Sep	RC	1	8/18	1	8/18
		PS	May	RC	2	58/42	2	58/42
		CN	Jun	RC	13	602/47	13	602/47
		DN	Jun	RC	22	1073/25	22	1073/25
	4S	OTB	Sep	RC	2	34/66	2	34/66
GDR	3K	OTM	Dec	CC	1	276/255	1	91/65
Norway	3N	PS	Jun Jul	CC CC	11 1	255/242 44/6	10 1	238/209 43/5
USSR	2J	OTM	Oct Nov	RC RC	- -	582/1186 272/505	3	110/193
	3K	OTM	Oct Nov	RC RC	- -	3478/5489 1992/4331		

Table 18. Short-finned squid (*Illex*) length and age sampling data for 1977.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Bulgaria	4X	OTM	Jun	CC	2	422		
			Jul	CC	1	100		
Cuba	4W	OTB	Jul	RC	3	388		
France (SP)	3Ps	OTB	Nov	RC	21	9634/9556		
Italy	3L	OTB	Jun	CC	1	60		
			Jul	CC	1	60		
			Aug	CC	1	60		
			Sep	CC	1	60		
			Nov	CC	1	60		
			Dec	CC	1	60		
Poland	4W	OTM	Jul	CC	5	1292/962		
			Aug	CC	9	2371/1732		
	5Z	OTB	Sep	RC	47	4130		
			Oct	RC	3	377		
USSR	4W	OTB	Jul	CC	57	11466		
			Aug	CC	34	6851		
			Nov	CC	9	1808		
		OTM	Jun	CC	137	27320		
			Jul	CC	69	13800		
			Aug	CC	14	2800		

Table 19. Research sampling data for 1977.

SPECIES Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
ATLANTIC COD								
Cuba	4VWX	OTB	Jul	RC	2	54		
Denmark (G)	1B	FPN	Jul	RC	1	2150	1	313
	1D	OTB	Mar	RC	1	581	1	274
			Apr	RC	1	322	1	204
	1E	OTB	Apr	RC	1	41	1	41
			Oct	RC	1	80	1	80
France (SP)	2J	OTB	Jan	RC	6	2571	1	401
	3K	OTB	Jan	RC	4	132	1	46
	3L	OTB	Feb	RC	10	2336	1	499
	3Pn	OTB	Jan	RC	11	251	1	251
	3Ps	OTB	Feb	RC	2	92	1	603
			Mar	RC	2	845		
			Nov	RC	12	3737		
	4R	OTB	Jan	RC	22	9159	1	550
Fed. Rep. Germany	1D	OTB	Dec	RC	3	777	3	153
	1E	OTB	Dec	RC	1	86	1	44
	1F	OTB	Dec	RC	1	534	-	101
	2J	OTB	Dec	RC	32	1473	32	538
HADDOCK								
Cuba	4VWX	OTB	Jul	RC	3	207		
ATLANTIC REDFISH								
Cuba	4VWX	OTB	Jul	RC	2	202		
Denmark (G)	1A	OTB	May	RC	6	1951		
			Aug	RC	4	1678		
	1B	OTB	Apr	RC	2	971		
			May	RC	5	2967		
			Jun	RC	20	2607		
			Jul	RC	8	1424		
			Aug	RC	4	1818		
			OTM	May	RC	1	126	
	1C	OTB	Feb	RC	1	176		
			Apr	RC	1	1000		
	1D	OTB	Jan	RC	2	1353		
			Mar	RC	1	553		
			Apr	RC	3	203		
	1E	OTB	Oct	RC	1	234		
France (SP)	3K	OTB	Jan	RC	2	481		
	3Pn	OTB	Feb	RC	10	2546		
	3Ps	OTB	Feb	RC	2	1005		
			Mar	RC	11	1652		
4R	OTB	Jan	RC	5	865			

Table 19. Research (continued)

SPECIES Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
<u>AMERICAN PLAICE</u>								
Denmark (G)	1A	OTB	Aug	RC	4	171		
	1B	OTB	Apr	RC	1	62		
			May	RC	9	708		
			Jun	RC	30	225		
			Jul	RC	7	1307		
			Aug	RC	3	50		
	1C	OTB	Feb	RC	1	1743		
			Apr	RC	1	399		
	1D	OTB	Jan	RC	2	1235		
			Mar	RC	1	1770		
			Apr	RC	4	629		
	1E	OTB	Oct	RC	1	72		

France (SP)	3K	OTB	Feb	RC	1	438	-	-
	3Ps	OTB	Mar	RC	38	735/747	1	145/151
<u>GREENLAND HALIBUT</u>								
Denmark (G)	1A	OTB	Apr	RC	2	700		
			May	RC	4	919		
			Aug	RC	4	1899		
	1B	OTB	Apr	RC	2	664		
			May	RC	10	486		
			Jun	RC	33	539		
			Jul	RC	8	869		
			Aug	RC	4	332		
	1C	OTB	Feb	RC	1	99		
			Apr	RC	1	124		
	1D	OTB	Jan	RC	2	287		
			Mar	RC	1	232		
			Apr	RC	3	76		
			Dec	RC	1	50		
	1E	OTB	Apr	RC	1	64		
			Oct	RC	2	92		

France (SP)	OB	OTB	Oct	RC	25	4693		
<u>GREENLAND COD</u>								
Denmark (G)	1D	OTB	Jan	RC	2	66		
			Apr	RC	4	86		
	1E	OTB	Apr	RC	1	96		
<u>STRIPED WOLFFISH</u>								
Denmark (G)	1B	OTB	May	RC	5	108		
<u>ATLANTIC ARGENTINE</u>								
Cuba	4VWX	OTB	Jul	RC	2	272		