

Northwest Atlantic



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Provisional List of Sampling Data for 1978

by

NAFO Secretariat

1. Introduction

The appended tables contain provisional lists of 1978 sampling data reported to the Secretariat by Bulgaria, Canada (Maritimes and Newfoundland), Cuba, Denmark (Greenland), France (Metropolitan, and St. Pierre and Miquelon), Federal Republic of Germany, German Democratic Republic, Japan, Poland, Portugal, Romania, Union of Soviet Socialist Republics, and United Kingdom. Data relevant to the commercial fisheries are arranged by species in Tables 1 to 20 and Table 21 contains data relevant to research vessel surveys.

The format of presentation is the same as that used in recent Sampling Yearbooks. 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 1978 Data

This advance release of 1978 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 1978 (and for earlier years), not yet reported, should be forwarded to the Secretariat as soon as possible so that *Sampling Yearbook* Vol. 23, when issued, will contain a complete listing of all available data for 1978, especially data pertaining to commercial fisheries.

Some notable omissions from this list of 1978 data are as follows:

- | | |
|-------------------|---|
| Canada(M) | - No data for winter flounder, herring and Squid- <i>Illex</i> , and no age-length keys for redfish |
| Canada(N) | - No data for herring, mackerel and squid- <i>Illex</i> , and no age-length keys for redfish |
| Denmark(G) | - No commercial data for redfish (see Table 20 for research data) |
| Faroe Islands | - No data reported |
| Fed. Rep. Germany | - No commercial data for redfish, American plaice and Greenland halibut |
| France(M) | - No age length-keys for cod length samples |
| German Dem. Rep. | - No commercial data for redfish |
| Italy | - No data reported |
| Japan | - No age-length keys for length samples of finfish species |
| Norway | - No data reported |
| Poland | - No age-length keys for cod, witch flounder, Greenland halibut and capelin samples |
| Spain | - No data reported |

- USSR - No length samples for squid-*Illex*, no age-length keys for American plaice, witch flounder, Greenland halibut, roundnose grenadier, mackerel and capelin samples, and inadequate keys for cod and redfish samples
- USA - Data forthcoming but not yet available.

It is obvious from the deficiencies noted above that the sampling data base for 1978 is very incomplete. In addition, little, if any, of the sampling data collected by scientific observers on other countries' vessels in 1978 has as yet been reported to the Secretariat, although arrangements have been made to incorporate this large volume of data into the NAFO sampling data base. It is possible that some of these observer data have been included in the national reports, but the Secretariat is unable to determine the extent of any overlap until the observer data are received.

3. Availability of Sampling Data

All available sampling data for 1971-78 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 work of NAFO. All requests should specify the actual data required, indicating at least the species, country and division.

CONTENTS

Table 1.	Atlantic cod	5
Table 2.	Haddock	9
Table 3.	Atlantic redfish	10
Table 4.	Red hake	12
Table 5.	Silver hake	13
Table 6.	Pollock	13
Table 7.	American plaice	14
Table 8.	Witch flounder	15
Table 9.	Yellowtail flounder	16
Table 10.	Greenland halibut	17
Table 11.	Cusk	18
Table 12.	Greenland cod	18
Table 13.	Roundnose grenadier	18
Table 14.	White hake	19
Table 15.	Atlantic mackerel	19
Table 16.	Atlantic butterfish	19
Table 17.	Atlantic argentine	20
Table 18.	Capelin	20
Table 19.	Long-finned squid (<i>Loligo</i>)	20
Table 20.	Short-finned squid (<i>Illex</i>)	21
Table 21.	Research sampling data for 1978	22

LIST OF SAMPLING DATA FOR 1978

1. Data Pertaining to Commercial Fisheries

The following summary of commercial sampling data available at the Secretariat is a listing by country, species and division of samples tabulated by species in Tables 1 to 20. 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 "RC" (research catches) have been included, where the type of gear used or the reported gear size indicated that they were relevant to commercial fishing operations.

Country	Species	Divisions
Bulgaria	Silver hake	4W
	Squid- <i>Illex</i>	4VWX
Canada(M)	Atlantic cod	2J, 3K, 30, 3Ps, 4R, 4S, 4T, 4Vn, 4Vs, 4W, 4X, 5Ze
	Haddock	30, 3Ps, 4Vs, 4W, 4X, 5Ze
	Atlantic redfish	2J, 3K, 30, 3Pn, 3Ps, 4R, 4S, 4T, 4Vn, 4Vs, 4W, 4X
	Pollock	3Ps, 4Vs, 4W, 4X, 5Ze
	American plaice	2J, 3K, 30, 3Ps, 4R, 4S, 4T, 4Vn, 4Vs, 4X
	Witch flounder	3K, 3Ps, 4R, 4S, 4Vn, 4Vs, 4W, 4X
	Yellowtail flounder	3L, 30, 4Vs, 5Ze
	Cusk	4X
	White hake	4S, 4X
Mackerel	4T, 4Vn, 4W, 4X	
Canada(N)	Atlantic cod	2J, 3K, 3L, 3N, 30, 3Pn, 3Ps, 4R
	Haddock	3N, 30, 3Ps, 4W
	Atlantic redfish	2J, 3K, 3L, 3M, 30, 3Ps, 4R, 4Vs
	American plaice	3K, 3L, 3N, 30, 3Ps, 4R
	Witch flounder	3K, 3L, 3N, 30, 3Ps, 4R
	Yellowtail flounder	3L, 3N, 30, 3Ps
Cuba	Silver hake	4VWX
	Capelin	3N
Denmark(G)	Squid- <i>Illex</i>	4VWX
	Atlantic cod	1C, 1D, 1E, 1F
	American plaice	1A, 1D
France(M)	Greenland cod	1D
	Atlantic cod	2J, 3K, 3L, 3M, 3Pn, 3Ps, 4R, 4Vn
France(SP)	Squid- <i>Illex</i>	4W
	Atlantic cod	3L, 3Ps, 4R, 4Vn
Fed. Rep. Germany	Atlantic redfish	3Ps, 4R
	American plaice	30
	Yellowtail flounder	30
	Squid- <i>Illex</i>	3Ps
	Atlantic cod	1C, 1D, 1E, 1F, 2H, 2J, 3K
German Dem. Rep.	Atlantic cod	2J, 3K
	Greenland halibut	2J, 3K
	Capelin	3L
Japan	Silver hake	4W, 5Ze, 6C
	Atlantic butterfish	5Zw, 6A, 6C
	Atlantic argentine	4Vs, 4X
	Capelin	3K, 3L, 3N, 30
	Squid- <i>Illex</i>	30, 4Vs, 4W, 4X, 5Ze, 5Zw, 6B, 6C
	Squid- <i>Loligo</i>	5Ze, 5Zw, 6A, 6C
Poland	Atlantic cod	2J, 3K
	Witch flounder	2J, 3K
	Greenland halibut	2J
	Capelin	3L
	Squid- <i>Illex</i>	3N, 4W
Portugal	Atlantic cod	2J, 3K, 3L, 3M

Country	Species	Divisions
Romania	Silver hake	6B
	Roundnose grenadier	3K
	Atlantic butterfish	5Zw, 6A
	Capelin	2J, 3K
	Squid- <i>Illex</i>	4W, 5Zw, 6B
	Squid- <i>Loligo</i>	5Zw, 6B
USSR	Atlantic cod	2J, 3K, 3M, 3N
	Atlantic redfish	2J, 3K, 3L, 3M, 3N, 4W
	Silver hake	4Vs, 4W, 5Ze, 5Zw, 6A
	Red hake	5Ze, 5Zw, 6A
	American plaice	2J, 3K, 3N
	Witch flounder	2J, 3K, 3L
	Greenland halibut	2J, 3K
	Roundnose grenadier	2G, 3K, 3M
	Atlantic mackerel	4W
	Atlantic argentine	4Vs, 4W, 4X
	Capelin	2J, 3K, 3L
UK	Atlantic cod	2J, 3K, 3M
	Atlantic redfish	2J, 3M
	Greenland halibut	2J

2. Data Pertaining to Research Surveys

The following summary of research sampling data available at the Secretariat is a listing by country, species and division of samples tabulated in Table 21. All of these samples were reported as research samples, as indicated by the abbreviation "RC" under "Type of Sample".

Country	Species	Divisions
Denmark(G)	Atlantic cod	1D, 1E
	Atlantic redfish	1A, 1B, 1C, 1D
	American plaice	1B, 1C, 1D, 1E
	Greenland halibut	1A, 1B, 1D
	Greenland cod	1D, 1E
	Polar cod	1A
	Spotted wolffish	1A
	Striped wolffish	1A
	France(SP)	Atlantic cod
Atlantic redfish		2J, 3K, 3L, 3Pn, 3Ps, 4R
American plaice		3Ps
Witch flounder		3Ps
Fed. Rep. Germany	Atlantic cod	1C, 1D, 1E, 1F, 2J
German Dem. Rep.	Atlantic cod	2H, 2J, 3K
	Atlantic redfish	0B, 2G, 2H, 2J, 3K
	Greenland halibut	0B, 2G, 2H, 2J, 3K
	Roundnose grenadier	0B, 2G, 2H, 2J, 3K

Table 1. Atlantic cod length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Canada (M)	2J	OTB	Mar	CL	1	365	1	50	
	3K	OTB	Mar	CL	4	1240	4	212	
			May	CL	1	352	1	58	
	30	OTB	Apr	CL	2	630	4	187	
			May	CL	2	784			
			Aug	CL	3	767	5	238	
			Sep	CL	2	674			
			Oct	CL	1	300			
	3Ps	OTB	Jan	CL	1	327	1	36	
			Apr	CL	1	306	1	56	
			Aug	CL	1	324	1	25	
	4R	OTB	Jan	CL	5	1531	8	383	
			Feb	CL	2	595			
			Mar	CL	1	321			
			Apr	CL	1	302	3	141	
			May	CL	2	400			
	4S	OTB	Jan	CL	2	807	6	344	
			Feb	CL	4	1356			
			May	CL	1	200	4	140	
			Jun	CL	3	600			
			Oct	CL	1	131			
	4T	OTB	May	CL	7	1400	12	407	
			Jun	CL	5	1012			
			Oct	CL	1	200			
			Nov	CL	1	231	2	66	
		SN	May	CL	4	800			7
			Jun	CL	3	599			
			Jul	CL	9	1810			
			Aug	CL	7	1400	17	582	
			Sep	CL	1	200			
		GN	OTB	Jun	CL	2	380	2	76
				Aug	CL	1	200	1	25
		LL	OTB	Jun	CL	6	1200	6	219
				Jul	CL	2	400	3	91
	Aug			CL	1	201			
	LHP	OTB	Jun	CL	1	200	1	21	
			Jul	CL	1	200			
			Aug	CL	1	199	2	71	
	4Vn	OTB	Jan	CL	6	1731	12	497	
			Feb	CL	6	2124			
			Jul	CL	1	200			
		LL	OTB	Jun	CL	3	603	3	153
				Jul	CL	2	478	7	344
	Aug			CL	5	1559			
	4Vs	OTB	Feb	CL	1	284	6	320	
			Mar	CL	5	1784			
			Apr	CL	2	618	3	153	
May			CL	1	412				
Jul			CL	1	300				
Sep			CL	1	205	2	85		
Oct			CL	1	360	3	139		
Nov			CL	2	592				
4W	OTB	Mar	CL	2	553	2	112		
		Jul	CL	1	342	4	182		
		Sep	CL	3	952				
		Oct	CL	1	953	2	72		
		Nov	CL	2	671				

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)	4W	SN	Sep	CL	2	516	2	58				
			LL	CL	1	299	1	54				
		LHP	Jun	CL	1	262	1	50				
			Jul	CL	2	353	2	94				
	Jul		CL	1	308	2	98					
	Sep	CL	1	288								
	4X	OTB	Jan	CL	1	313	6	326				
			Feb	CL	1	275						
		Mar	CL	4	1297							
		Jul	CL	2	615							
	GN	Aug	Aug	CL	1	304	3	129				
			Aug	CL	1	238						
			Aug	CL	1	238						
	LL	Feb	Feb	CL	5	1345	8	437				
			Mar	CL	3	886						
			Apr	CL	1	232						
	5Ze	OTB	Feb	CL	5	1470	6	386				
			Mar	CL	2	618						
			May	CL	2	512						
			Jun	CL	5	1397	7	340				
Jul			CL	8	2300							
Oct			CL	5	1371							
Nov			CL	2	359							
Canada (N)	2J	OTB	Jan	CL	1	1048	-	426				
			Feb	CL	7	3893						
		GN	Aug	Aug	CL	24	3327	-	959 ¹			
				LL	CL	3	243	-	959 ¹			
				LHP	CL	2	271	-	959 ¹			
		FPN	Jul	Jul	CL	12	2167	-	959 ¹			
				Aug	CL	9	2730					
		3K	OTB	Jan	CL	1	799	-	355			
				Feb	CL	4	1563					
				Mar	CL	4	2222					
	Apr			CL	2	741						
	May			CL	6	1755						
	Jun			CL	1	315						
	GN	Jul	Jul	CL	17	2289	-	1123 ²				
			Sep	CL	5	1061	-	407 ³				
		LHP	Sep	Sep	CL	11	4026	-	407 ³			
				FPN	CL	3	799	-	1123 ²			
	Jul	Jul	CL	24	8765							
		3L	OTB	Mar	CL	2	821	-	157			
	Apr			CL	6	1946						
	May			CL	3	1272						
	Jun			CL	2	968						
	Jul			CL	1	315						
	Aug			CL	4	2029						
	Sep			CL	2	1268						
	Oct			CL	1	522						
	Nov			CL	4	2242						
	Dec			CL	2	999						
	GN			Jun	Jun	CL	4			315	-	1262 ⁴
					Jul	CL	6			1200		
Aug		CL	12		1876							
Sep		CL	2		121							
LL	Sep	Sep	CL	3	599	-	523 ⁵					
		Sep	CL	3	599	-	523 ⁵					

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)	3L	LHP	Jun	CL	11	2811	-	1262 ⁴	
			Sep	CL	10	1482	-	523 ⁵	
		FPN	Jun	CL	11	6440	}	-	1262 ⁴
			Jul	CL	6	2278			
	3N	OTB	Feb	CL	1	757	-	78	
			Jun	CL	2	1157	-	100	
			Sep	CL	1	264	-	110	
			Nov	CL	3	1641	-	225	
	30	OTB	Jan	CL	1	309	-	66	
			May	CL	6	1246	}	-	568
			Jun	CL	1	592			
			Sep	CL	1	735	-	62	
			Nov	CL	5	2456	}	-	430
			Dec	CL	3	1449			
	3Pn	OTB	Feb	CL	1	234	-	82	
		LL	Mar	CL	8	2694	-	411	
	3Ps	OTB	Jan	CL	2	732	}	-	256
			Feb	CL	1	476			
			Mar	CL	1	554			
			Apr	CL	1	432			
		GN	May	CL	4	456	-	812 ⁶	
			Jun	CL	4	831	-	708 ⁷	
		LL	Feb	CL	1	1383	}	-	166
			Mar	CL	4	2011			
			Apr	CL	8	1904			
			May	CL	12	3669			
			Jun	CL	3	835			
			Jul	CL	6	1723			
			Aug	CL	5	1415			
			Sep	CL	7	1973			
	Oct	CL	1	443					
	Nov	CL	5	1339	-	546			
LHP	Aug	CL	1	137	-	708 ⁷			
	FPN	Jun	CL	9	3495	}	-	708 ⁷	
Jul	CL	1	463						
4R	OTB	Jan	CL	7	3275	}	-	389	
		Feb	CL	2	1198				
		May	CL	5	2690				
		Jun	CL	1	317				
	Sep	CL	1	216	-	30			
	GN	May	CL	6	1677	-	225		
		Jun	CL	10	5027	-	637 ⁸		
	LL	Sep	CL	1	360	-	77		
FPN	Jul	CL	3	1471	-	637 ⁸			
Denmark (G)	1C	OTB	Jan	CL	1	881	}	2	398
			Feb	CL	1	971			
			Mar	CL	1	886			
			May	CL	1	922			
	1D	LHP	Aug	CC	2	1784	}	3	516
			Sep	CC	1	61			
			FPN	May	CC	1			
			Jul	CC	3	2785	}	8	655
			Aug	CC	1	179			
	1E	OTB	Apr	CL	1	917	1	255	
FPN		Sep	CL	2	1665	1	275		

Table 1. Atlantic cod (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Denmark (G)	1F	OTB	Aug	CL	1	911	1	330
			Sep	CL	1	1411		
France (M)	2J	OTB	Feb	CC	1	116		
	3K	OTB	Feb	CC	2	400		
	3L	OTB	Feb	CC	2	365		
			Mar	CC	5	1004		
	3M	OTB	Oct	CC	5	1019		
			Nov	CC	19	4053		
	3Pn	OTB	Feb	CC	1	200		
	3Ps	OTB	Feb	CC	1	201		
	4R	OTB	Jan	CC	9	1629		
			Feb	CC	2	400		
			Mar	CC	6	1201		
	4Vn	OTB	Jan	CC	2	400		
			Feb	CC	7	532		
Mar			CC	3	600			
France (SP)	3L	OTB	May	CL	1	331	-	-
			Oct	CL	2	496	-	-
	3Ps	OTB	Feb	CL	1	362	42	660 ⁹
			May	CL	1	244	-	-
			Oct	CL	1	304	-	-
	4R	OTB	Jan	CC	8	2206	17	945 ¹⁰
			Mar	CC	1	242		
4Vn	OTB	Feb	CL	2	750	-	-	
Fed. Rep. Germany	1C	OTB	Mar	CC	4	997	7	491 ¹¹
	1D	OTB	Mar	CC	7	1655	7	491 ¹¹
	1E	OTB	Mar	CC	7	503	7	491 ¹¹
	1F	OTB	Jan	CL	1	267	7	491 ¹¹
	E.G.	OTB	Jan	CL	1	380	2	256
			Feb	CL	1	338		
			May	CL	2	637	1	159
			Jun	CL	1	374		
			Jul	CL	1	343		
	Aug	CL	1	228	1	130		
	2H	OTB	Feb	CC	5	1412	5	193
2J	OTB	Feb	CC	24	6853	26	1102 ¹²	
3K	OTB	Feb	CC	2	561	26	1102 ¹²	
German Dem. Rep.	2J	OTB	Jan	CC	5	1256	5	440
			Feb	CC	20	3981		
			Mar	CC	1	137		
3K	OTB	Feb	CC	2	307	1	80	
Poland	2J	OTB	Jan	CC	2	2297		
	3K	OTB	Feb	CC	2	608		
			Mar	CC	1	377		
Portugal	2J	OTB	Mar	CC	3	300	3	160
			Apr	CC	4	400	4	126
	3K	OTB	Mar	CC	8	781	8	189
			Apr	CC	6	600	6	139

Table 1. Atlantic cod (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples			
					No.	No. meas.	No.	No. aged		
Portugal	3L	OTB	Apr	CC	3	300	}	6	119	
			May	CC	3	300				
			Dec	CC	1	100				
	3M	OTB	Apr	CC	5	500	}	10	130	
			May	CC	6	600				
			Oct	CC	22	2200				
			Nov	CC	17	1647				
			Dec	CC	3	300				
	USSR	2J	OTB	Jan	CC	12	3529	}	-	-
				Apr	CC	3	979			
3K		OTB	Apr	CC	2	741	}	-	-	
			Mar	CC	2	429				
3M		OTB	Jan	CC	28	10208	}	3	698	
			Mar	CC	2	429				
			Aug	RC	4	809				
3N		OTB	Feb	CC	4	1287	}	-	-	
			Mar	CC	3	1062				
			May	CC	2	675				
UK		2J	OTB	Apr	CL	1	285	}	1	66 ¹³
		3K	OTB	Mar	CL	1	360			
	3M	OTB	May	CL	1	243				

- 1 Same key used for GN, LL, LHP and FPN.
- 2 Same key used for GN and FPN.
- 3 Same key used for GN and LHP.
- 4 Same key used for GN, LHP and FPN.
- 5 Same key used for GN, LL and LHP.
- 6 Same key used for GN and LL.

- 7 Same key used for GN, LL, LHP and FPN.
- 8 Same key used for GN and FPN.
- 9 Research sample key for 3Ps used.
- 10 Research sample key for 3Pn used.
- 11 Same key used for 1C, 1D, 1E and 1F.
- 12 Same key used for 2J and 3K.
- 13 Same key used for 2J and 3K.

Table 2. Haddock length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples				
					No.	No. meas.	No.	No. aged			
Canada (M)	30	OTB	May	CL	1	204	}	1	33		
			3Ps	OTB	Aug	CL				2	717
			4Vs	OTB	May	CL				1	206
	4W	OTB	Jan	CL	1	202	}	11	386		
			Feb	CL	4	967					
			Mar	CL	7	2532					
			Apr	CL	6	2085					
			Aug	CL	1	254					
			Oct	CL	1	253					
			LL	CL	1	291					
	4X	OTB	Mar	CL	1	200	}	4	122		
			Apr	CL	2	377					
			May	CL	1	200					
			Jun	CL	1	200					
	4X	OTB	Jan	CL	5	1230	}	17	534		
			Feb	CL	6	1459					
			Mar	CL	7	1989					
			Apr	CL	1	209					
May			CL	7	1747						
Jun			CL	9	1988						

Table 2. Haddock (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples				
					No.	No. meas.	No.	No. aged			
Canada (M)	4X	OTB	Ju1	CL	12	2582	}	13	340		
			Sep	CL	1	218					
			Dec	CL	1	193					
			SN	GN	May	CL	1	250	}	1	34
		Ju1			CL	1	200				
			LL		Jan	CL	2	363	}	5	174
		Feb			CL	1	228				
		Mar			CL	2	412				
		Apr			CL	2	387				
		May			CL	1	260				
		Aug			CL	1	200				
			LHP		Oct	CL	1	200	}	1	24
	Ju1	CL			1	200					
		5Ze	OTB	Aug	CL	1	238	}	2	66	
	Feb			CL	9	2011					
	Mar			CL	1	235					
	Ju1			CL	1	200					
	Oct			CL	13	4811					
				Nov	CL	3	1394	}	11	255	
				CL	3	1394					
Canada (N)	3N	OTB	Ju1	CL	1	528					
	30	OTB	Feb	CL	1	322					
			Apr	CL	1	638					
			Jun	CL	3	3114					
			Nov	CL	1	425					
	3Ps	OTB	Oct	CL	1	491					
			Nov	CL	1	480					
	4W	OTB	Mar	CL	2	1046					
			Apr	CL	1	595					

Table 3. Atlantic redfish length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Canada (M)	2J	OTM	Sep	CL	3	121/479			
			OTB	Aug	CL	5	477/604		
				Sep	CL	2	258/142		
				Nov	CL	1	107/95		
	3K	OTB	Feb	CL	1	99/101			
			Mar	CL	5	412/611			
			Apr	CL	1	114/86			
			Sep	CL	1	105/95			
	30	OTB	Ju1	CL	3	180/388			
	3Pn	OTB	Mar	CL	1	69/131			
			Aug	CL	2	164/236			
	3Ps	OTB	Jun	CL	1	137/63			
			Ju1	CL	1	153/38			
			Aug	CL	4	324/478			
			Sep	CL	1	84/131			
	4R	OTB	Jan	CL	2	559/164			
			Feb	CL	1	150/50			

Table 3. Atlantic redfish (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Canada (M)	4R	OTB	Jul	CL	3	321/279			
			Aug	CL	3	235/365			
	4S	OTB	Jun	CL	3	248/352			
			Jul	CL	8	659/1041			
			Aug	CL	3	163/437			
			Sep	CL	2	207/193			
		OTM	Jul	CL	4	299/501			
			Aug	CL	1	72/128			
	4T	OTB	Jun	CL	8	670/925			
			Jul	CL	1	84/116			
			Aug	CL	1	64/136			
			Oct	CL	1	152/48			
		OTM	Jun	CL	5	403/597			
			Jul	CL	1	79/121			
	Aug		CL	1	96/104				
	4Vn	OTB	Jan	CL	1	71/98			
			Apr	CL	1	131/69			
			Jun	CL	5	469/543			
			Jul	CL	7	500/888			
			Sep	CL	1	94/116			
			Aug	CL	1	72/127			
	4Vs	OTB	Feb	CL	1	65/176			
			Mar	CL	2	268/132			
			Apr	CL	1	103/109			
			May	CL	1	88/112			
			Jun	CL	5	453/457			
			Jul	CL	7	607/793			
			Aug	CL	5	338/598			
			Oct	CL	1	111/139			
	4W	OTB	Apr	CL	1	52/177			
			Jun	CL	1	75/127			
			Jul	CL	3	203/418			
			Aug	CL	1	67/74			
	4X	OTB	Mar	CL	1	55/153			
			Jun	CL	1	66/149			
			Aug	CL	1	90/115			
			Dec	CL	1	135/133			
	Canada (N)	2J	OTB	Feb	CL	1	184/263	-	-
				Jul	CL	1	388/352	-	-
				Aug	CL	1	415/302	-	-
3K		OTB	Feb	CL	1	134/180	-	-	
			Mar	CL	8	901/1765	-	-	
			Apr	CL	9	1686/1358	-	-	
			May	CL	2	624/516	-	-	
			Jul	CL	1	255/211	-	-	
			Sep	CL	1	290/288	-	-	
			Nov	CL	1	104/323	-	-	
		OTM	Jul	CL	1	304/323	-	-	
3L		OTB	Apr	CL	1	244/204	-	-	
			Jun	CL	1	141/190	-	-	
			Nov	CL	2	404/466	-	-	
			Dec	CL	2	437/638	-	-	
		OTM	Nov	CL	1	282/273	-	-	
3M		OTB	Sep	CL	1	367/311	-	-	
			OTM	Aug	CL	2	1134/1416	-	-
		Oct	CL	2	469/451	-	-		

Table 3. Atlantic redfish (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (N)	30	OTB	Jun	CL	2	1256/1490	-	-
			Jul	CL	1	334/530	-	-
			Aug	CL	1	211/381	-	-
			Sep	CL	1	329/385	-	-
	3Ps	OTB	Feb	CL	1	132/345	-	632/761 ¹
			Mar	CL	1	1324/1940	-	632/761 ¹
			May	CL	1	277/176	-	632/761 ¹
			Jun	CL	2	1382/1600	-	632/761 ¹
			Aug	CL	2	861/899	-	632/761 ¹
			Sep	CL	1	276/387	-	632/761 ¹
			Nov	CL	2	473/482	-	632/761 ¹
			Dec	CL	2	670/873	-	632/761 ¹
	4R	OTB	Jan	CL	3	482/717	-	397/513
Feb			CL	1	233/198	-	397/513	
4Vs	OTB	May	CL	4	1128/993	-	-	

France (SP)	3Ps	OTB	Jun	CL	1	109/78	-	-
	4R	OTB	Jan	CL	2	168/95	-	-
			Jun	CL	1	61/177	-	-

USSR	2J	OTB	Feb	CC	1	155/101	-	-
	3K	OTB	Jan	CC	1	102/241	-	-
			Feb	CC	6	831/754	-	-
			Mar	CC	6	837/940	-	-
			Apr	CC	8	1184/1443	-	-
	3L	OTB	Feb	CC	5	523/908	-	-
	3M	OTB	Jan	CC	14	2194/1883	-	-
			Feb	CC	1	350/548	1	124/172
			Mar	CC	6	1333/1647	-	-
	3N	OTB	Feb	CC	6	865/1124	-	-
Mar			CC	3	389/547	-	-	
4W	OTB	Jul	CC	2	234/181	-	-	

UK	2J	OTB	May	CL	1	83	-	-
	3M	OTB	May	CL	1	74	-	-

¹ Same keys used for all 4 quarters.

Table 4. Red hake length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
USSR	5Ze	OTB	Apr	CC	37	7427	-	122/140
	5Zw	OTB	Feb	CC	19	3846	-	91/85
	6A	OTB	Mar	CC	50	10098	-	50/105

Table 5. Silver hake length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Bulgaria	4W	OTM	Aug	CC	1	193			
Cuba	4VWX	OTB	May	CC	?	5529/5669			
			Jun	CC	?	4859/5104			
			Jul	CC	?	2902/3789			
			Aug	CC	?	2735/3610			
			Sep	CC	?	244/527			
Japan	4W	OTB	Jul	CC	1	100			
	5Ze	OTB	Nov	CC	1	136			
	6C	OTB	Nov	CC	1	64/136			
			Dec	CC	1	89/111			
Romania	6B	OTM	Nov	CC	1	104/96			
USSR	4Vs	OTB	Jul	CC	4	200/600	-	-	
	4W	OTB	Apr	CC	34	3266/3580	}	-	334/403
			May	CC	129	14640/11181			
			Jun	CC	95	10692/8461			
			Jul	CC	53	3920/6530			
			Aug	CC	83	7342/9245			
	5Ze	OTB	Apr	CC	50	4997/4920	-	100/119	
	5Zw	OTB	Jan	CC	29	3225/2679	}	-	101/85
			Feb	CC	38	4350/3211			
	6A	OTB	Mar	CC	99	9199/10679	-	85/97	

Table 6. Pollock length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Canada (M)	3Ps	OTB	Nov	CL	1	113	1	21	
	4Vs	OTB	Mar	CL	1	1226	1	41	
			May	CL	3	931	3	104	
			Jul	CL	1	314	2	81 ¹	
			Oct	CL	1	300	1	35	
	4W	OTB	Jan	CL	2	444	}	8	300
			Feb	CL	1	305			
			Mar	CL	5	1356			
			Apr	CL	2	633			
			Jun	CL	3	809			
			Jul	CL	1	261			
			FPN	Jun	CL	5			
	4X	OTB	Jan	CL	2	566	}	13	503
			Feb	CL	5	1295			
			Mar	CL	7	2404			
			Apr	CL	2	481			
			May	CL	4	1034			
Jun			CL	1	303				
Jul			CL	6	1477				
Dec			CL	1	245				

Table 6. Pollock (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples			
					No.	No. meas.	No.	No. aged		
Canada (M)	4X	GN	Jun	CL	2	323	}	2	55	
			Aug	CL	1	183		2	53	
			Sep	CL	1	195				
			Oct	CL	1	61		1	25	
	5Ze	OTB	Feb	CL	6	2005	}	6	236	
			May	CL	2	495		}	4	118
			Jun	CL	2	613				
			Jul	CL	1	393				
			Oct	CL	1	266				

¹ Same key used for 4Vs and 4W.

Table 7. American plaice length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample of	Length samples		Age samples					
					No.	No. meas.	No.	No. aged				
Canada (M)	2J	OTB	Feb	CL	1	69/131	}	1	17/23			
	3K	OTB	Feb	CL	2	121/284		}	3	43/70		
			Mar	CL	1	88/112						
			May	CL	1	32/156						
	30	OTB	Aug	CL	1	54/146		1	14/22			
	3Ps	OTB	Oct	CL	1	63/76		1	14/21			
	4R	OTB	Jan	CL	1	39/160		}	2	29/63		
			Feb	CL	1	21/162						
	4S	OTB	May	CL	1	37/163		1	13/32			
	4T	OTB	Sep	CL	1	47/153		}	1	15/31		
			Oct	CL	1	33/174						
		SN	Jun	CL	4	169/631		}	6	54/105		
			Jul	CL	3	93/508						
			Aug	CL	2	73/327						
			Sep	CL	1	14/181						
	4Vs	OTB	Feb	CL	6	673/549		}	9	147/219		
			Mar	CL	3	160/369						
			May	CL	4	203/686						
			Aug	CL	2	134/266						
		SN	Jun	CL	1	62/102		}	1	14/26		
			Jul	CL	1	86/114						
	4X	OTB	Mar	CL	1	36/64		1	15/27			
4Vn	SN	Jun	CL	2	116/285	}	7	71/165				
		Jul	CL	5	184/773							
		Aug	CL	2	82/344							
Canada (N)	3K	OTB	Jan	CL	3	203/651	}	-	114/209			
			Feb	CL	3	227/648						
		GN	Jul	CL	6	539/1892						
	3L	OTB	Jan	CL	1	161/209				}	-	19/29
			Apr	CL	2	374/360						
			May	CL	7	1625/1669						
			Jun	CL	3	521/747						
			Jul	CL	10	2104/2950						
			Aug	CL	3	467/695						
			Sep	CL	2	435/779						

Table 7. American plaice (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples			
					No.	No. meas.	No.	No. aged		
Canada (N)	3L	OTB	Oct	CL	4	723/914	}	-	197/316	
			Nov	CL	5	1171/2540				
			Dec	CL	1	87/286				
		GN		Jul	CL	1	40/229	}	-	170/341
				Aug	CL	6	554/1652			
	3N	OTB	Jan	CL	3	460/540	}	-	229/355	
			Feb	CL	1	208/365				
			Mar	CL	2	585/896				
			Apr	CL	2	214/449				
			May	CL	2	254/506				
			Jun	CL	2	321/495				
			Jul	CL	2	350/285				
			Aug	CL	4	854/826				
			Oct	CL	7	1205/1568				
			Nov	CL	3	577/640				
			30	OTB	Feb	CL				2
	Mar	CL			2	399/671				
	Apr	CL			2	185/494				
	May	CL			6	945/999				
	Jun	CL			1	58/418				
	Jul	CL			2	228/479				
	Sep	CL			2	342/788				
	Oct	CL			3	385/745				
	Nov	CL			3	492/1183				
	Dec	CL			1	119/246				
	3Ps	OTB			Feb	CL	1	105/218	}	-
			Mar	CL	1	142/226				
Apr			CL	2	290/461					
May			CL	1	71/192					
Aug			CL	2	538/1113					
4R	OTB	Jun	CL	1	79/205	-	27/60			
Denmark (G)	1A	LL	Jun	CC	2	80				
	1D	LL	Apr	CC	2	73				
France (SP)	30	OTB	May	CL	1	188				
USSR	2J	OTB	Feb	CC	1	108/198				
	3K	OTB	Jan	CC	1	90/271				
	3N	OTB	Feb	CC	3	253/735				
			Mar	CC	3	273/674				
			Jun	CC	2	717/924				

Table 8. Witch flounder length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Canada (M)	3K	OTB	May	CL	1	110/120	-	-	
	3Ps	OTB	Feb	CL	1	158/44	1	16/17	
	4R	OTB	Jan	CL	1	130/70	}	3	44/48
			Feb	CL	2	286/127			
	4S	OTB	Jan	CL	2	196/210	2	35/40	

Table 8. Witch flounder (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples			
					No.	No. meas.	No.	No. aged		
Canada(M)	4Vn	OTB	Jan	CL	1	84/118	}	2	28/25	
			Mar	CL	1	124/76		}	1	15/17
			May	CL	1	123/272				
		SN		Jun	CL	6	127/1149	}	6	44/109
				Jul	CL	4	104/675			
				Aug	CL	2	173/321			
		4Vs	OTB	Feb	CL	2	190/210	}	7	115/101
				Mar	CL	5	508/471			
		4W	OTB	Mar	CL	2	217/302	}	2	36/44
				Apr	CL	1	111/228			
	4X	OTB	Mar	CL	1	101/117		1	18/17	
Canada(N)	3K	OTB	Jan	CL	1	378/267	}	-	108/135	
			Mar	CL	1	408/281				
			May	CL	3	476/803				
		GN		Jul	CL	6	730/1066		-	233/345
	3L	OTB		May	CL	1	148/393		-	34/62
				Sep	CL	2	669/165		-	82/67
				Nov	CL	2	429/189		-	118/112
	3N	OTB		Mar	CL	3	524/612		-	87/109
				Apr	CL	1	216/276		-	32/44
				Jul	CL	1	133/293		-	61/81
				Nov	CL	2	302/632	}	-	133/179
	Dec	CL	1	146/339						
	3O	OTB		Feb	CL	1	443/287	}	-	136/166
				Mar	CL	2	267/445			
				Apr	CL	1	166/238			
				May	CL	1	152/133			
				Dec	CL	1	128/231			
3Ps	OTB	May	CL	1	111/181		-	22/33		
4R	OTB	Jan	CL	6	1623/1801		-	212/245		
Poland	2J	OTB	Mar	CC	1	113/537				
	3K	OTB	Feb	CC	3	842/1093				
			Mar	CC	1	189/720				
			Apr	CC	2	225/740				
USSR	2J	OTB	Feb	CC	2	187/399				
			Mar	CC	1	122/192				
	3K	OTB		Jan	CC	1	51/239			
				Feb	CC	16	1218/3083			
				Mar	CC	7	787/1273			
				Apr	CC	13	1535/2458			
	3L	OTB	Feb	CC	2	331/351				

Table 9. Yellowtail flounder length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada(M)	3L	OTB	Jun	CL	1	103/90	1	11/15
	3O	OTB	Jul	CL	1	85/115	1	11/18

Table 9. Yellowtail flounder (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Canada(M)	4Vs	OTB	Apr	CL	1	45/137	4	50/52	
			Jun	CL	3	380/220			
			Aug	CL	3	310/225			
		SN		Jul	CL	3	43/529	3	19/56
		5Ze	OTB	Feb	CL	1	41/33	1	10/11
Canada(N)	3L	OTB	May	CL	2	408/501	-	182/220	
			Jun	CL	5	2079/1732			
			Jul	CL	1	276/168			
			Aug	CL	2	495/360			
			Sep	CL	1	221/299			
	3N	OTB	Feb	CL	1	129/317	-	31/56	
			Apr	CL	3	405/560			
			May	CL	4	829/854			
			Jun	CL	1	181/177			
			Jul	CL	3	524/873			
			Aug	CL	2	607/709			
			Sep	CL	1	72/289			
			Oct	CL	6	932/1460			
			Nov	CL	3	312/629			
			Dec	CL	1	151/225			
	30	OTB	Apr	CL	2	412/455	-	158/202	
			May	CL	6	1494/1159			
			Aug	CL	1	339/299			
			Nov	CL	1	350/422			
	3Ps	OTB	Apr	CL	7	1856/2169	-	179/231	
May			CL	1	175/259				
France(SP)	30	OTB	May	CL	1	192	-	-	
			Oct	CL	1	185/239			

Table 10. Greenland halibut length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada(N)	3K	OTB	Jan	CL	3	261/336	-	181/207
			Feb	CL	3	494/535		
			Mar	CL	1	242/241		
			Apr	CL	2	227/320		
			May	CL	2	280/417		
		GN	Jul	CL	6	983/1328	-	221/252
	Sep		CL	4	761/1176	-	176/240	
	3L	OTB	Mar	CL	1	138/169	-	45/55
			GN	Jun	CL	4	444/678	-
		Aug	CL	4	359/471			
	Sep	CL	2	200/353				
4R	OTB	Feb	CL	1	174/141	-	37/58	
		Jun	CL	1	32/47	-	31/45	
German Dem. Rep.	2J	OTB	Mar	CC	14	659/745	3	69/109
	3K	OTB	Mar	CC	5	214/309	-	-

Table 10. Greenland halibut (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Poland	2J	OTB	Jan	CC	1	245/320		
			Feb	CC	4	924/1462		
			Mar	CC	2	367/822		
UK	2J	OTB	May	CL	1	70		
USSR	2J	OTB	Jan	CC	2	257/334		
			Feb	CC	10	1188/1614		
			Mar	CC	1	77/181		
			Apr	CC	1	120/195		
	3K	OTB	Jan	CC	1	105/125		
			Feb	CC	1	89/141		

Table 11. Cusk length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada(M)	4X	LL	Jan	CL	1	319		
			Apr	CL	1	185		
			Jun	CL	1	161		

Table 12. Greenland cod length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Denmark(G)	1D	FPN	Jul	CC	2	102	4	163
			Aug	CC	1	48		

Table 13. Roundnose grenadier length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Romania	3K	OTM	Aug	CC	5	437/620		
USSR	2G	OTB	Sep	CC	4	600/396		
	OTM	Ju1	CC	6	1278/911			
		Sep	CC	3	462/312			
	3K	OTB	Aug	CC	5	929/571		
			Dec	CC	5	494/452		
	OTM	Ju1	CC	3	701/386			
3M	OTB	Feb	CC	4	772/708			
		Mar	CC	4	1028/1052			

Table 14. White hake length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada(M)	4S	OTB	Jun	CL	1	190		
	4X	LL	May	CL	1	317		

Table 15. Atlantic mackerel length and age sampling data for 1978.

Canada(M)	4T	PS	Jul	CC	11	1245	}	11	203					
			Aug	CC	1	110								
			Oct	CC	1	142								
		GN		Jun	CC	13	1479	}	12	313				
				Jul	CC	2	220							
				Aug	CC	5	534							
		LHP		Jul	CC	2	158	}	3	55				
				Aug	CC	2	224							
				4Vn	LHP	Aug	CC				5	652	1	18
		FPN		Jun	CC	8	925		3	74				
				Jul	CC	2	233				1	26		
				4W	GN	Jun	CC				4	505	2	47
	Jul	CC	3	404		1	28							
		LHP	Jul	CC		1	107	}	5	114				
			Aug	CC	8	865								
		4X	GN	May	CC	1	125	}	6	155				
				Jun	CC	7	749							
				Jul	CC	1	101				2	61		
		FPN		Jun	CC	15	1646		9	267				
				Jul	CC	6	734				5	217		
				FWR	Aug	CC	1				100	2	132	
Romania	4W	OTM	Jul	CC	1	202		1	75					
			6B	OTM	Nov	CC				2	200	}	1	48
					Dec	CC				2	200			
USSR	4W	OTB	Jul	CC	5	964								
			Aug	CC	3	620								

Table 16. Atlantic butterfish length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Japan	5Zw	OTB	Dec	CC	4	796			
	6A	OTB	Dec	CC	1	104/96			
	6C	OTB	Dec	CC	1	200			
Romania	5Zw	OTM	Oct	CC	3	590	}	3	124
			Nov	CC	4	800			
	6A	OTM	Dec	CC	4	800	2	43	

Table 17. Atlantic argentine length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Japan	4Vs	OTM	Aug	CC	1	200			
	4X	OTB	Jul	CC	2	300			
			Aug	CC	5	1001			
			Sep	CC	2	300			
USSR	4Vs	OTB	Jun	CC	4	761	-	85	
	4W	OTB	Apr	CC	9	1907	}	-	37
			May	CC	32	6332			
	4X	OTB	May	CC	5	1072	}	-	179
			Jun	CC	1	73			

Table 18. Capelin length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Cuba	3N	OTM	Jul	RC	3	622			
German Dem. Rep.	3L	OTM	May	CC	1	501/94	1	80/20	
Japan	3K	OTM	Oct	CC	1	95/113			
	3L	OTM	Jun	CC	5	422/571			
	3N	OTM	Jun	CC	9	880/1528			
			Jul	CC	5	321/673			
	3O	OTM	Jun	CC	2	400			
Poland	3L	OTM	Jan	CL	1	196/175			
			Jun	CL	1	119/241			
Romania	2J	OTM	Aug	CC	2	80/464	}	12	375/601
			Sep	CC	10	442/2112			
	3K	OTM	Aug	CC	5	498/1276	}	9	279/402
			Sep	CC	4	166/906			
			Oct	CC	12	538/1879			
		Nov	CC	2	265/168		13	403/576	
USSR	2J	OTM	Aug	CC	5	220/1285			
	3K	OTM	Aug	CC	9	835/2107			
			Nov	CC	8	1305/1367			
	3L	OTM	Apr	CC	5	811/1207			
			May	CC	6	872/1341			

Table 19. Long-finned squid (Loligo) length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Japan	5Ze	OTB	Nov	CC	1	194		
			Dec	CC	1	199		

Table 19. Long-finned squid (Loligo) (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Japan	5Zw	OTB	Dec	CC	6	981		
	6A	OTB	Dec	CC	1	207		
	6C	OTB	Nov	CC	1	200		
			Dec	CC	2	394		

Romania	5Zw	OTM	Oct	CC	3	475		
			Nov	CC	5	1000		
	6B	OTM	Dec	CC	3	594		

Table 20. Short-finned squid (Illex) length and age sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Bulgaria	4VWX	OTM	Jul	CC	4	900		

Cuba	4VWX	OTM	May	CC	2	49/115		
				CC	2	217		
			Jun	CC	2	132/111		
				CC	3	836		
			Jul	CC	3	946/708		
				CC	4	2578		
Aug	CC	5	599/450					
	CC	2	428					
		Sep	CC	4	3338/2763			

France(M)	4W	OTB	Sep	CL	3	218/228		

France(SP)	3Ps	OTB	Oct	RC	36	436/729		
			LHP	CL	1	37		
			CL	1	237			

Japan	30	OTB	Sep	CC	1	200		
			Oct	CC	1	201		
	4Vs	OTB	Aug	CC	2	404		
				CC	3	501		
			Sep	CC	4	372/434		
				CC	1	100		
	4W	OTB	Jul	CC	5	1000		
				CC	3	282/319		
			Aug	CC	3	611		
				CC	4	458/342		
			Sep	CC	4	600		
				CC	4	422/379		
			Oct	CC	5	903		
				CC	4	422/381		
			Nov	CC	2	402		
	4X	OTB	Jul	CC	1	200		
				CC	3	599		
Oct			CC	1	88/112			
			CC	1	200			
5Ze	OTB	Nov	CC	2	189/211			
5Zw	OTB	Dec	CC	2	274/130			

Table 20. Short-finned squid (*Illex*) (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Japan	6B	OTB	Jul	CC	8	1609		
			Aug	CC	1	157/43		
			Sep	CC	6	1200		
	6C	OTB	Nov	CC	1	110/90		
			Dec	CC	1	100		
					2	193/207		
Poland	3N	OTM	Jul	CC	1	275/281		
	4W	OTM	Jul	CC	6	1761/1363		
			Aug	CC	2	676/448		
Romania	4W	OTM	Jul	CC	13	1958/1469		
			Aug	CC	2	347/281		
	5Zw	OTM	Oct	CC	5	340/392		
	6B	OTM	Nov	CC	8	772/829		

Table 21. Research sampling data for 1978.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
<u>ATLANTIC COD</u>								
Denmark(G)	1D	OTB	Apr	RC	3	274	3	274
			Aug	RC	4	102	4	102
	1E	OTB	Nov	RC	1	105	1	105
France(SP)	2J	OTB	Jan	RC	12	6524	-	621 ¹
	3K	OTB	Jan	RC	1	196	}	-
			Feb	RC	13	1419		
	3L	OTB	Feb	RC	10	2549	-	621 ¹
	3Pn	OTB	Feb	RC	4	112	17	945 ²
	3Ps	OTB	Feb	RC	8	438	}	42
			Mar	RC	44	614		
4R	OTB	Jan	RC	11	3462	}	17	
		Feb	RC	8	3128			
Fed. Rep. Germany	1C	OTB	Dec	RC	3	540	18	714 ³
	1D	OTB	Dec	RC	13	1013	18	714 ³
	1E	OTB	Dec	RC	4	104	18	714 ³
	1F	OTB	Dec	RC	5	1571	18	714 ³
	2J	OTB	Nov	RC	21	538	20	527
German Dem. Rep.	2H	OTB	Oct	RC	4	149	3	138
	2J	OTB	Sep	RC	12	355	-	-
	3K	OTB	Oct	RC	21	200	3	94

Table 21. Research (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
<u>ATLANTIC REDFISH</u>								
Denmark(G)	1A	OTB	Nov	RC	4	1616		
	1B	OTB	Jul	RC	6	1265		
			Aug	RC	4	1482		
	1C	OTB	Jul	RC	2	579		
	1D	OTB	Jan	RC	1	337		
			Apr	RC	5	1009		
	OTM	Feb	RC	1	111			

France(SP)	2J	OTB	Feb	RC	7	135/119		
	3K	OTB	Feb	RC	10	461/492		
	3L	OTB	Feb	RC	6	289/214		
	3Pn	OTB	May	RC	5	829/684		
	3Ps	OTB	Feb	RC	14	1722/1549		
			Oct	RC	37	3781/3627		
4R	OTB	Feb	RC	7	761/508			

German Dem. Rep.	0B	OTB	Oct	RC	14	1570/1289	3	129/101
	2G	OTB	Oct	RC	16	1168/1092	3	139/107
	2H	OTB	Oct	RC	12	1297/959	4	226/152
	2J	OTB	Sep	RC	30	3518/2973	10	345/330
	3K	OTB	Oct	RC	16	4684/4383	3	611/680

<u>AMERICAN PLAICE</u>								
Denmark(G)	1B	OTB	Jul	RC	6	149		
			Aug	RC	3	55		
	1C	OTB	Mar	RC	1	1025		
			Apr	RC	1	77		
	1D	OTB	Feb	RC	1	73		
			Apr	RC	4	54		
1E	OTB	Feb	RC	1	106			

France(SP)	3Ps	OTB	Feb	RC	4	200/230	27	345/494
			Mar	RC	36	1664/2523		
			Oct	RC	48	1821/2197		

<u>WITCH FLOUNDER</u>								
France(SP)	3Ps	OTB	Feb	RC	6	101/71	24	158/183
			Mar	RC	25	316/313		

<u>GREENLAND HALIBUT</u>								
Denmark(G)	1A	OTB	Oct	RC	1	160		
			Nov	RC	4	1159		
	1B	OTB	Jul	RC	3	164		
			Aug	RC	4	2237		
	1D	OTB	Jan	RC	1	111		
			Apr	RC	3	73		
			Jul	RC	1	77		

Table 21. Research (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
German Dem. Rep.	0B	OTB	Oct	RC	31	959/859	12	384/351
	2G	OTB	Oct	RC	17	1335/702	9	430/287
	2H	OTB	Oct	RC	12	562/457	7	290/216
	2J	OTB	Sep	RC	31	946/1232	9	180/225
	3K	OTB	Oct	RC	36	546/657	7	174/247
<u>GREENLAND COD</u>								
Denmark (G)	1D	OTB	Feb	RC	1	174	1	174
		LL	Apr	RC	1	77	1	76
		LHP	Aug	RC	2	115	2	115
	1E	OTB	Feb	RC	1	202	1	182 ⁴
			Apr	RC	1	265	1	182 ⁴
<u>POLAR COD</u>								
Denmark (G)	1A	OTB	Nov	RC	4	58		
<u>ROUNDNOSE GRENADIER</u>								
German Dem. Rep.	0B	OTB	Oct	RC	6	439/297	3	141/69
	2G	OTB	Oct	RC	3	509/409	3	74/95
	2H	OTB	Oct	RC	2	298/184	1	50/19
	2J	OTB	Sep	RC	7	499/245	4	186/92
	3K	OTB	Oct	RC	2	240/251	2	67/90
<u>SPOTTED WOLFFISH</u>								
Denmark (G)	1A	LL	Jun	RC	2	81		
<u>STRIPED WOLFFISH</u>								
Denmark (G)	1A	LL	Jun	RC	2	127		

- ¹ Same key used for 2J, 3K and 3L.
- ² Same key used for 3Pn and 4R.
- ³ Same key used for 1C, 1D, 1E and 1F.
- ⁴ Same key used for 1st and 2nd quarters.