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Supplementary report on ICNAF Herring Otolith Exchange,
1971-72 (ICNAF Res. Doc. 72/92)

by

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Introduction

At the 1972 Annual Meeting of ICNAF Parsons and Winters (Res. Doc. 72/92) presented a report on the Herring Otolith Exchange Program which was organized and co-ordinated by the St. John's Biological Station of the Fisheries and Marine Service of Canada. At that time age readings of the otolith samples selected for exchange had been received from only 4 member countries (Canada, USA, Federal Republic of Germany and the USSR. Since then the otolith samples have been examined by Polish scientists whose age readings are included in this document as a supplement to the original report.

Results

Year-class designations for individual specimens by all countries involved in the otolith exchange are tabulated in Appendix Tables 1-6. Comparison of Polish year-class estimates with other laboratories is shown in Tables 1-6 with an overall comparison in Table 7. Polish age-readings compare very favourably with those from the two Canadian laboratories, particularly the St. John's Biological Station; there is also good agreement between the Polish age interpretations and those from the USSR and USA. The addition of the Polish data do not, however, change the overall results and conclusions of the otolith exchange program which revealed considerable discrepancies in year-class estimates between participating laboratories.

Table 1

Sample No. 1
Location: George's Bank

Date: July 27, 1970
No. of fish: 150

		Po1			
		67	66	65	
Can., St. Andrews, N.B.	67	6	1		7
	66		39		39
	65			3	3
		6	40	3	49

		Po1			
		67	66	65	
Can., St. John's, Nfld.	67	6	1		7
	66		38		38
	65		1	3	4
		6	40	3	49

		Po1			
		67	66	65	
USA	67	5	9		14
	66		28	1	29
	65		3	2	5
		5	40	3	48

		Po1			
		67	66	65	
FRG	68	2			2
	67	3	35	1	39
	66		4	2	6
		5	39	3	47

		Po1			
		67	66	65	
USSR	67	2			2
	66	4	36	1	41
	65		4	2	6
		6	40	3	49

Table 2

Sample No. 2
Location: Bliss Island, N.B.

Date: July 27, 1970
No. of fish: 50

		Pol		
		68	67	
Can., St. Andrews, N. B.	68	42	2	44
	67		6	6
		42	8	50

		Pol		
		68	67	
Can., St. John's, Nfld.	68	42	1	43
	67		7	7
		42	8	50

		Pol		
		68	67	
USA	68	42	4	46
	67		4	4
		42	8	50

		Pol		
		68	67	
FRG	69	42		42
	68	1	7	8
		43	7	50

		Pol		
		68	67	
USSR	68	41	2	43
	67	1	6	7
		42	8	50

Table 3

Sample No. 3
 Location: Dry Ledge, Yarmouth County, N.S.

Date: July 20, 1970
 No. of fish: 50

		Po1						
		67	66	65	64	63	62	
Can., St. Andrews, N.B.	66	1	6	3	3	2		15
	65		1	2	4			7
	64			4	8	5		17
	63			1	3	2	2	8
	62				1			1
	61						1	1
		1	7	10	19	9	3	49

		Po1						
		67	66	65	64	63	62	
Can., St. John's, Nfld.	66	1	6	2	3			12
	65		1	4	1			6
	64			2	8	4		14
	63			1	6	3		10
	62			1	1	2		4
	61						3	3
		1	7	10	19	9	3	49

		Po1					
		66	65	64	63	62	
USA	66	1					1
	65	3	3	2			8
	64	2		4	1		7
	63		3	6	4		13
	62		2	6	3	3	14
		6	8	18	8	3	43

		Po1						
		67	66	65	64	63	62	
FRG	67		4		2			6
	66	1	3	4	1			9
	65			1	4			5
	64			2	6	3		11
	63			1	3	3		7
	62			1	2	2		5
	61						3	3
		1	7	9	18	8	3	46

Table 3

Sample No. 3
Location: Dry Ledge, Yarmouth County, N.S.

Date: July 20, 1970
No. of fish: 50

Pol

	67	66	65	64	63	62	
65	1	6	3	2			12
64		1	4	6			11
63			2	7	5		14
62				4	4		8
61			1			2	3
60						1	1
	1	7	10	19	9	3	49

Table 4

Sample No. 4
Locality: Canso Bank

Date: March 19, 1971
No. of fish: 50

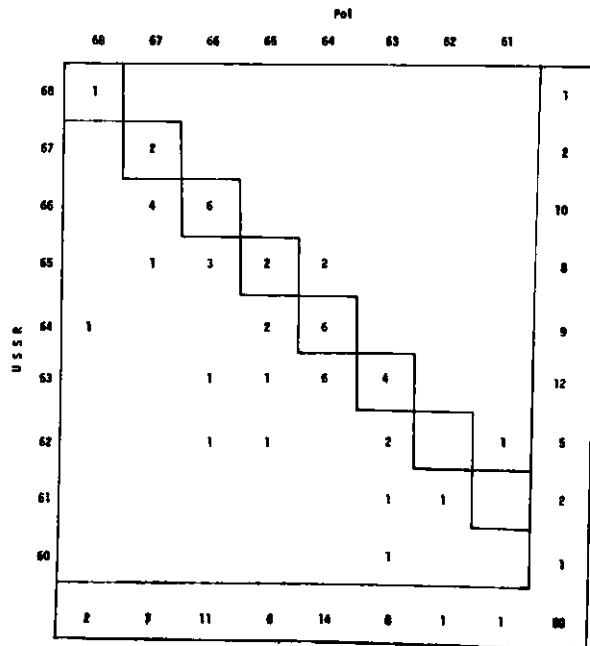
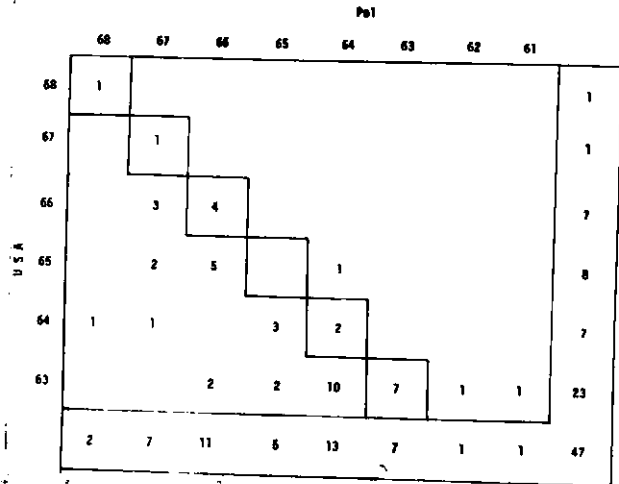
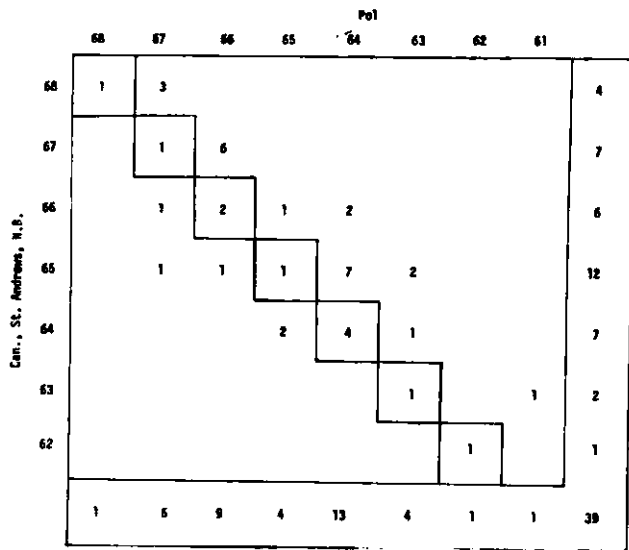
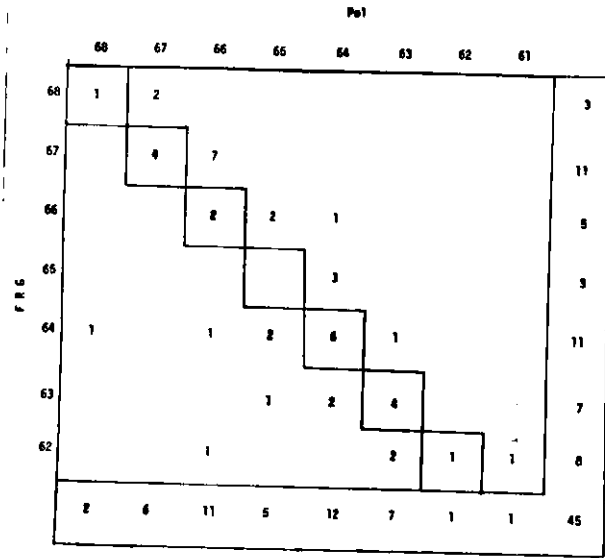
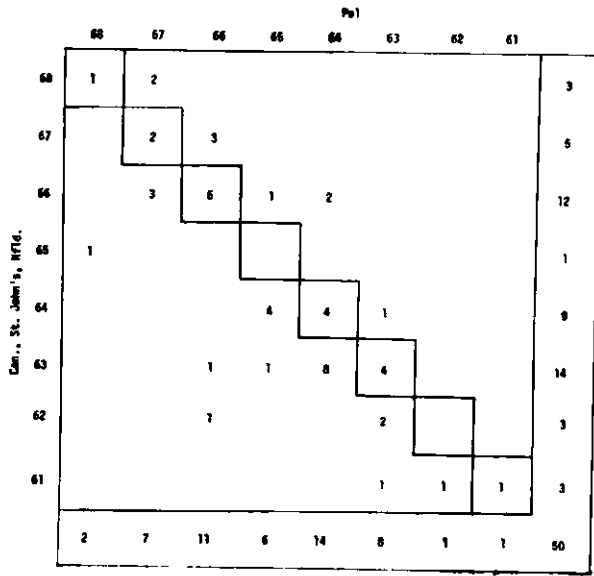


Table 5

Sample No. 5
Locality: Caraquet Is.

Date: Sept. 3, 1970
No. of fish: 50

		Po1						
		64	63	62	61	60	59	
Can., St. Andrews, N. B.	65		1					1
	64	8	2	1				11
	63	1	9	3	1			14
	62			1	4	2		7
	61		2	4	3	4	1	14
		9	14	9	8	6	1	47

		Po1						
		64	63	62	61	60	59	
Can., St. John's, Nfld.	64	5	1					6
	63	4	8	1				13
	62		1	2				3
	61		1	1	1			3
	60			2	2	2		6
	59		2	3	4	4	1	18
		9	11	9	7	6	1	43

		Po1						
		64	63	62	61	60	59	
USA	64	4	3					7
	63	4	5	1				10
	62	1	6	8	8	6	1	30
		9	14	9	8	6	1	47

		Po1						
		64	63	62	61	60	59	
FRG	65	6	1					7
	64	2	5	1				8
	63		1	1				2
	62	1	2	2	1			6
	61		3	5	7	6	1	22
		9	12	9	8	6	1	45

Table 5

Sample No. 5
Locality: Caraquet Is.

Date: Sept. 3, 1970
No. of fish: 50

Po1

	64	63	62	61	60	59	
64	2	1					3
63	6	5	1				12
62	1	4	3	1			9
61		2	1	3	2		8
60		2	1	1	3		7
59				2	1	1	4
58			2				2
	9	14	8	7	6	1	45

Table 6

Sample No. 6
 Locality: Bay de Vieux, Nfld.

Date: January 1, 1971
 No. of fish: 50

Po1

	65	64	63	62	61	60	59	
63	2	1	2					5
62		1	5	4	1			11
61	1		1	2	1			6
60		2	2	2	6			12
59				1	2			3
58				1		1		2
	3	4	10	10	10	1		38

Po1

	65	64	63	62	61	60	59	
63	3	4	11	10	13	1	1	43

Po1

	65	64	63	62	61	60	59	
65				1				1
64	1							1
63		1	1					2
62	1	3	9	10	12	1	1	37
	2	4	11	10	12	1	1	41

Po1

	65	64	63	62	61	60	59	
65	1							1
64								
63	1	1	3					5
62			2	2				4
61			3	2	2			7
60	1	3	3	6	11	1	1	26
	3	4	11	10	13	1	1	43

Po1

	65	64	63	62	61	60	59	
65				1				1
64	1	1						2
63	1	1	5	3	2			12
62		1	4	6	8		1	20
	2	3	10	9	10		1	35

Table 7. Percentages of identical age readings between pairs of laboratories

	Sample 1 Georges Bank	Sample 2 Bliss Is. N.B.	Sample 3 Dry Ledge Yarmouth County	Sample 4 Canso Bank	Sample 5 Caraquet Is. Gulf St. Lawrence	Sample 6 Bay de Vieux S.W. Nfld.
USSR vs FRG	6%	2%	26%	34%	12%	2%
USSR vs USA	62%	94%	44%	42%	26%	6%
USSR vs Canada (St. John's, Nfld.)	76%	96%	38%	42%	42%	14%
USSR vs Canada (St. Andrews, N.B.)	78%	98%	14%	14%	14%	10%
FRG vs USA	38%	8%	20%	12%	12%	2%
FRG vs Canada (St. John's)	22%	2%	44%	38%	10%	6%
FRG vs Canada (St. Andrews)	22%	4%	38%	36%	22%	44%
USA vs Canada (St. John's)	70%	94%	22%	26%	24%	6%
USA vs Canada (St. Andrews)	72%	96%	6%	8%	16%	0
Canada (St. John's) vs Canada (St. Andrews)	98%	98%	60%	28%	30%	4%
Poland vs Canada (St. Andrews)	96%	96%	38%	28%	42%	26%
Poland vs Canada (St. John's)	94%	98%	42%	36%	40%	20%
Poland vs USA	68%	92%	32%	30%	34%	2%
Poland vs FRG	18%	2%	24%	42%	26%	2%
Poland vs USSR	84%	94%	28%	42%	34%	14%

Appendix Table 1. Year-class estimates for sample of herring from Georges Bank, July 27, 1970.

Spec. No.	Length	Sex	Maturity	USSR	FRG	USA	Canada St. John's Nfld.	Canada St. Andrews N.B.	Poland
1	260	F	3	66	67	66	66	66	66
2	257	M	4	66	67	66	66	66	66
3	267	F	3	66	67	66	66	66	66
4	261	F	3	66	67	66	66	66	66
5	283	F	3	65	66	65	66	66	66
6	280	M	4	66	67	65	66	66	66
7	273	F	3	66	67	66	66	66	66
8	250	F	3	66	67	67	66	66	66
9	267	M	4	66	67	66	66	66	66
10	278	M	4	66	66	66	66	66	66
11	270	F	3	66	66	66	66	66	66
12	261	M	2	66	66	66	66	66	66
13	265	M	3	66	67	66	66	66	66
14	268	F	3	66	67	66	66	66	66
15	285	F	4	65	67	65	66	66	66
16	283	M	4	65	66	66	66	66	66
17	258	M	4	66	67	67	67	67	67
18	263	F	3	66	67	66	66	66	66
19	263	F	3	66	67	66	66	66	66
20	252	F	3	66	67	67	67	67	66
21	230	M	2	67	68	67	67	67	67
22	255	F	3	66	67	67	66	66	66
23	272	F	3	66	67	66	66	66	66
24	265	F	4	66	67	66	66	66	66
25	276	M	4	65	66	66	65	65	65
26	280	M	3	65	66	65	65	65	65
27	272	M	3	66	67	66	66	66	66
28	281	M	3	65	67	66	66	66	66
29	252	F	2	66	67	67	66	66	66
30	256	F	3	66	67	67	66	66	66
31	252	F	3	66	67	67	67	67	-
32	242	F	3	67	68	67	67	67	67
33	254	M	2	66	67	67	67	67	67
34	282	M	2	66	67	66	66	66	66
35	285	M	4	66	67	65	65	65	65
36	264	F	3	66	67	66	66	66	66
37	260	F	3	66	67	66	66	66	66
38	263	M	3	66			67	67	67
39	256	F	3	66	67	67	66	66	66
40	272	M	2	66	67	66	65	66	66
41	256	F	2	66	67	66	66	66	66
42	265	F	3	66	67	66	66	66	66
43	257	M	4	66	67	67	66	66	66
44	259	F	3	66	67	67	66	66	66
45	266	F	3	66	67	67	66	66	66
46	270	M	3	66	67	66	66	66	66
47	273	F	3	66	67	66	66	66	66
48	267	F	3	66	67	66	66	66	66
49	250	M	3	66	67	67	67	67	67
50	250	F	3	66	67	67	66	66	66

Appendix Table 2. Year-class estimates for sample of herring from Bliss Island, New Brunswick, July 27, 1970.

Spec. No.	Length	Sex	Maturity	USSR	FRG	USA	Canada St. John's Nfld.	Canada St. Andrews N.B.	Poland
1	233			67	68	67	67	67	67
2	237			67	68	67	67	67	67
3	210			67	68	68	67	67	67
4	208			67	68	68	68	68	68
5	239			67	68	68	67	67	67
6	213			67	68	67	67	67	67
7	220			67	68	67	67	67	67
8	202			68	68	68	67	68	67
9	172			68	69	68	68	68	68
10	180			68	69	68	68	68	68
11	172			68	69	68	68	68	68
12	152			68	69	68	68	68	68
13	142			68	69	68	68	68	68
14	154			68	69	68	68	68	67
15	134			68	69	68	68	68	68
16	158			68	69	68	68	68	68
17	148			68	69	68	68	68	68
18	144			68	69	68	68	68	68
19	149			68	69	68	68	68	68
20	158			68	69	68	68	68	68
21	141			68	69	68	68	68	68
22	154			68	69	68	68	68	68
23	143			68	69	68	68	68	68
24	138			68	69	68	68	68	68
25	144			68	69	68	68	68	68
26	129			68	69	68	68	68	68
27	144			68	69	68	68	68	68
28	127			68	69	68	68	68	68
29	133			68	69	68	68	68	68
30	144			68	69	68	68	68	68
31	137			68	69	68	68	68	68
32	142			68	69	68	68	68	68
33	150			68	69	68	68	68	68
34	148			68	69	68	68	68	68
35	149			68	69	68	68	68	68
36	129			68	69	68	68	68	68
37	143			68	69	68	68	68	68
38	135			68	69	68	68	68	68
39	146			68	69	68	68	68	68
40	140			68	69	68	68	68	68
41	144			68	69	68	68	68	68
42	127			68	69	68	68	68	68
43	149			68	69	68	68	68	68
44	137			68	69	68	68	68	68
45	149			68	69	68	68	68	68
46	134			68	69	68	68	68	68
47	155			68	69	68	68	68	68
48	130			68	69	68	68	68	68
49	142			68	69	68	68	68	68
50	145			68	69	68	68	68	68

Appendix Table 3. Year-class estimates for sample of herring from Dry Ledge, Yarmouth County, July 20, 1970.

Spec. No.	Length	Sex	Maturity	USSR	FRG	USA	Canada St. John's Nfld.	Canada St. Andrews N.B.	Poland
1	314	M	5	63	64	63	64	64	64
2	301	M	4	65	66	64	65	65	66
3	327	F	4	63	64	62	64	64	64
4	302	M	5	65	66	64 or 65	66	66	67
5	324	F	4	63	64	63	64	64	65
6	327	F	4	63	64	62 or 63	63	64	-
7	318	F	4	64	65	63	64	64	64
8	300	F	3	64	66	64 or 65	65	64	65
9	314	F	4	64	65	63	64	64	64
10	294	M	5	65	67	65	66	66	66
11	297	M	5	65	67	65	66	66	66
12	314	M	5	64	65	63	64	64	65
13	290	M	4	65	66	65	66	66	65
14	289	M	5	65	66?	? or 65	66	66	65
15	289	F	4	65	66		66	66	64
16	290	M	4	65	66	65	65	66	65
17	325	F	4	62	62	62	62	63	63
18	309	M	5	63	65	64	64	65	64
19	331	M	5	62	62?	62	62	63	63
20	318	F	4	63	63	63	64	64	63
21	337	F	2	61	62	< 62	62	63	65
22	294	M	4	64	66	65	65	65	65
23	325	F	4	63	63	63	63	64	64
24	318	M	5	63	63	63	63	64	63
25	332	M	5	62	62	62	63	63	63
26	345	F	4	62	62?	< 62	63	62	64
27	332	M	5	62	63	62	63	63	64
28	318	M	5	63	64	63	64	64	64
29	320	F	3	64	64	63	65	65	65
30	309	M	6	65	66	64	66	66	66
31	315	M	5	62	64	63	63	64	64
32	343	F	5	62	62	< 62	62	63	64
33	330	F	5	63	62	62	63	63	64
34	333	M	5	63	63	< 62	63	64	64
35	309	F	4	64	65	64	64	65	64
36	316	F	5	63	64	63	64	64	63
37	329	F	4	61	< 61	62	61	63	62
38	331	F	4	63	63	62	63	64	65
39	282	F	3	65	67	66	66	66	66
40	288	M	5	64	67	65	66	66	66
41	350	F	5	60	< 61	< 62	61	61	62
42	296	M	5	65	67	65	66	66	64
43	301	M	5	63	64	64	63	64	63
44	329	M	5	61	< 61	62	61	63	62
45	292	M	5	64	67	65	66	66	64
46	300	F	2	64	64	64	64	65	64
47	302	F	3	65	66	64 or 65	66	66	66
48	303	M	5	64	64	64	65	65	64
49	331	M	5	62	63	62 or 63	64	64	63
50	314	M	5	63	64	63	64	66	63

Appendix Table 4. Year-class estimates for sample of herring from Canso Bank, Nova Scotia, March 19, 1971.

Spec. No.	Length	Sex	Maturity	USSR	FRG	USA	Canada St. John's Nfld.	Canada St. Andrews N.B.	Poland
1	327	M	8	63	64	63	64	-	65
2	363	M	8	61	< 62	< 63	61	62	62
3	352	M	8	60	< 62	< 63	61	63	63
4	345	F	8	62	< 62	< 63	61	63	61
5	291	F	3	66	66	65	67	67	66
6	310	M	8	65	67	64	66	66	67
7	325	M	3	63	64	63	63	65	64
8	293	M	2	66	67	65	67	67	66
9	306	M	2	66	66	65	66	66	66
10	306	M	8	66	67	65	66	65	67
11	318	F	8	64	64	63 or 64	63	65	64
12	321	F	8	63	64	63	63	64	64
13	319	M	8	64	65	63	64	65	64
14	282	F	2	66	67?	66	67	67	67
15	315	F	8	64	64	63	63	64?	64
16	262	M	4	67	68	67	68	67?	67
17	233	M	2	68	68	68	68	68	68
18	325	M	8	64	64?	64	64	65	65
19	332	F	8	62	63	63 or < 63	63	64	65
20	328	F	8	63	64	63	63	64	64
21	326	M	8	64	64?	< 63	63	65	64
22	317	F	8	65	66	64	64	65?	65
23	303	M	2	65	65	64	66	66	64
24	356	F	8	62	< 62	< 63	62	63?	63
25	307	M	8	64	64	64	63	65	64
26	320	F	8	63	65	63	64	64	64
27	338	M	8	63	62?	< 63	63	-	63
28	295	M	2	66	67	65	66	67	67
29	323	M	8	63	63	63	64	65	64
30	334	M	8	63	63	< 63	63	64	64
31	273	F	3	67	68	66	68	68	67
32	322	M	8	64	64	64	65	66?	68
33	314	F	4	65	66	64	66	66	65
34	296	F	8	65	67	65	66	-	66
35	322	F	8	63	64	63	63	65	66
36	327	M	8	64	64	63	64	64	65
37	311	M	8	65	66	65	66	66	64
38	297	F	2	65	67	65	66	67	66
39	347	F	8	62	62	< 63	62	63?	66
40	326	M	8	63	63	< 63	63	64	63
41	284	F	2	66	67	66	67	68	67
42	290	F	2	66	67	66	67	67	66
43	300	F	8	66	67	66	66	66	66
44	333	F	8	63	63	63 or < 63	64	-	63
45	324	F	3	64	64?	63	64	65	64
46	278	F	2	66	67	66	66	67	66
47	325	M	8	63	64	63	63	65	63
48	324	F	3	62	63	63	63	65	63
49	286	F	2	65	67	66	66	67	66
50	358	F	3	61	63	< 63	62	-	63

Appendix Table 5. Year-class estimates for sample of herring from Caraquet Island, N.B., September 3, 1970.

Spec. No.	Length	Sex	Maturity	USSR	FRG	USA	Canada St. John's Nfld.	Canada St. Andrews N.B.	Poland
1	308	M	6	64	65	64	64	64	64
2	355	M	6	61	< 61	< 62	59	61	60
3	356	M	6	60	< 61	< 62	< 59	61	60
4	315	M	5	64	65	63	64	64	64
5	351	F	6	59	< 61	< 62	< 59	61	61
6	357	F	6	59	< 61	< 62	< 59	61	-
7	332	M	7	62	63	62	62	63	62
8	322	M	6	63	64	63	63	63	63
9	323	M	6	63	65	63	64	64	64
10	337	M	6	60	< 61	< 62	59	62	61
11	334	M	6	62	62	62	63	63	64
12	339	M	7	62	62	< 62	63	63	63
13	357	M	6	60	< 61	< 62	59	61	63
14	316	F	6	63	64	63	63	64	64
15	324	M	6	63	62	63	63	64	62
16	345	M	6	61	62?	< 62	61	63	62
17	343	F	6	61	< 61	< 62	60	62	61
18	354	F	6	59	< 61	< 62	59	61	60
19	346	M	5	60	< 61	< 62	59	61	62
20	340	M	5	60	< 61	< 62	59	62	60
21	303	F	6	64	64	64	63	63	63
22	321	M	5	63	63	63	63	63	63
23	360	F	6	(60) 59	< 61	< 62	60	< 61	62
24	332	F	6	62	< 61	62	60	62	62
25	362	M	5	59	< 61	< 62	59	61	61
26	342	F	6	61	< 61	< 62		62	61
27	332	M	5	62	< 61	62	60	63	61
28	330	M	6	62	62	62	62	63	62
29	321	M	5	63	64	63	63	64	64
30	349	M	6	61	< 61	< 62	59	62	-
31	351	M	6	(60) 59	< 61	< 62	59	61	61
32	340	M	6	60	< 61	< 62	60	61	60
33	343	M	5	62	62?	< 62	63	63	63
34	312	M	5	63	65	64	63	64	64
35	315	M	6	63	65	64	64	64	64
36	367	F	5	58	< 61	< 62	< 59	< 61	62
37	355	F	6	58	< 61	< 62	59	61	62
38	350	M	6	59	< 61	< 62	59	< 61	59
39	342	F	5	61	< 61	< 62	60	62	60
40	320	M	5	63	64	63	63	64	63
41	330	M	6	61	62	62	62	63	63
42	315	F	8	63	65	64	64	64	64
43	350	M	6	60	< 61	< 62	60	63	-
44	350	F	6	60	< 61	< 62	59	61	63
45	344	F	6	61	< 61	< 62	61	63	63
46	317	M	5	62	64	63	64	64	63
47	310	M	5	63	65	64	63?	65	63
48	311	F	5	63	64	64	63	63	63
49	320	M	6	62	64	63	63	63	63
50	345	F	6	61	62	< 62	61	62	61

Appendix Table 6. Year-class estimates for sample of herring from Bay de Vieux, Southwest Nfld., January 1, 1971.

Spec. No.	Length	Sex	Maturity	USSR	FRG	USA	Canada St. John's Nfld.	Canada St. Andrews N.B.	Poland
1	364	F	8	60(59)	< 62	< 63	< 60	62	59
2	354	F	8	60	< 62	< 63	< 60	62	61
3	327	M	8	62	65	63	63	65	63
4	355	M	8	60	< 62	< 63	< 60	63	61
5	353	M	4	62	63	< 63	63	63	63
6	328	M	8	63	63	63	63	64	64
7	350	M	8	60	< 62	< 63	60	< 62	63
8	365	M	8	59	< 62	< 63	< 60	< 62	61
9	347	F	8	62	< 62	< 63	< 60	63	62
10	360	F	8	59	< 62	< 63	< 60	62	-
11	346	M	8	62	< 62	< 63	60	63	64
12	332	M	8	63	64	63	63	64	65
13	351	M	8	60	< 62	< 63	< 60	< 62	61
14	348	M	8	61	< 62	< 63	< 60	63	-
15	360	M	8	59	< 62	< 63	< 60	< 62	61
16	355	F	8	60	< 62	< 63	< 60	< 62	62
17	337	F	4	63	< 62	< 63	61	63	63
18	330	M	4	62	< 62	63	61	-	61
19	350	F	8	60	< 62	< 63	< 60	< 62	61
20	361	F	8	60	< 62	< 63	< 60	< 62	62
21	383	F	8	58	< 62	< 63	< 60	< 62?	60
22	370	F	8	(60)59	< 62	< 63	< 60	< 62?	61
23	345	F	4	62	< 62	< 63	< 61	-	-
24	365	M	8	60	< 62	< 63	< 60	< 62	64
25	344	F	4	62	< 62	< 63	< 61	62	63
26	340	F	8	62	< 62	< 63	62	63	63
27	333	M	4	62	< 62	< 63	< 61	< 62	62
28	359	M	8	60	< 62	< 63	< 60	62	61
29	360	F	8	60	< 62	< 63	< 60	< 62	-
30	354	M	8	61	< 62	< 63	< 60	62	62
31	317	F	8	63	< 62	63	64	-	-
32	364	F	8	60	< 62	< 63	< 60	-	63
33	350	M	8	60	< 62	< 63	< 60	-	64
34	345	M	8	63	< 62	< 63	63	63	63
35	351	M	8	61	< 62	< 63	< 60	62	62
36	361	M	8	60	< 62	< 63	< 60	< 62	61
37	351	M	8	61	< 62	< 63	62	63	63
38	349	M	8	61	< 62	< 63	60	62	-
39	352	M	4	62	< 62	< 63	< 61	62	63
40	390	F	4	57(56)	< 62	< 63	< 61	< 62?	61
41	361	M	8	59	< 62	< 63	< 60	< 62	-
42	339	M	4	62	< 62	< 63	62	63	62
43	348	M	8	61	< 62	< 63	< 60	< 62	61
44	338	M	8	-	62?	< 63	60	63	61
45	370	F	8	59	< 62	< 63	< 60	< 62?	62
46	366	F	4	61	64?	< 63	65	-	65
47	335	M	8	62	< 62	< 63	62	63	62
48	338	M	8	63	< 62	< 63	60	63	65
49	376	M	4	58	< 62	< 63	< 61	< 62	62
50	381	F	8	59(58)	< 62	< 63	< 60	< 62	63