

ANNUAL MEETING - JUNE 1968Herring Otolith Exchange 1967

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A herring otolith exchange, initiated in 1966 for comparison of ageing techniques, was continued on an informal basis in 1967. Two samples of 100 otoliths each were collected by Poland from Subarea 5 (Div. 5Z) and examined by scientists at laboratories in Poland, the United States, and Canada. The age estimates were made independently and, at least for the U.S. and Canadian laboratories, were without any reference whatsoever to the size of the fish. The results are presented in the accompanying tables.

Following the method of reporting used in 1967 in comparing the estimates from each pair of laboratories, the cases in which readings were identical are shown by numbers inside the squares. The disagreements are outside.

It is again obvious from these comparisons that there are significant differences in the criteria used in the three countries to estimate age. For both samples, the age estimates from Poland tended to be higher (as much as 5 years in 2 cases) than those from Canada, whereas estimates from the U.S. laboratory were lower in Sample 1 and higher in Sample 2. There was closer agreement between the two Canadian laboratories than for any of the others, and this is undoubtedly a result of the many consultations and workshops that have been held on the whole subject of ageing techniques.

This exercise has been useful in establishing the fact that there is a lack of uniformity in descriptions of the age- and year-class structure of herring stocks in the ICNAF area. It has been relatively futile, however, for resolving the differences. The solution to the problem would seem to lie in frequent and direct communication and consultation between scientists in the various laboratories.

Sample No. 1
 Location: Georges Bank (Division 52)
 Date: September 4, 1965
 No. of fish: 100

Mean Age - (number of fish
 in brackets)

Canada (St. John's) - 4.22 (93)
 Canada (St. Andrews) - 4.35 (94)
 United States - 4.18 (76)
 Poland - 4.81 (91)

Age--Canada (St. John's)

Age--Canada (St. Andrews)	3	4	5	6	7	Not Read
3	14					
4	1	38	1			
5		4	30			
6				5		
7					1	
Not Read	2	1	1			2

Age--United States

Age--Canada (St. Andrews)	3	4	5	6	7	Not Read
3	11	3				
4	3	29	8			
5		19	13	2		
6			4	1		
7			1			
Not Read		2				4

Age--Poland

Age--Canada (St. Andrews)	3	4	5	6	7	8	Not Read
3	11	3					
4	2	7	24	2	3		2
5		3	25	3	1		2
6			1	1	2	1	
7			1				
8							
Not Read				1			5

Sample No. 1 (continued)
 Location: Georges Bank (Division 5Z)
 Date: September 4, 1965
 No. of fish: 100

Age--United States

	3	4	5	6	7	Not Read
3	11	4				2
4	3	30	10			
5		18	11	2		1
6			4	1		
7			1			
Not Read		1				1

Age--Poland

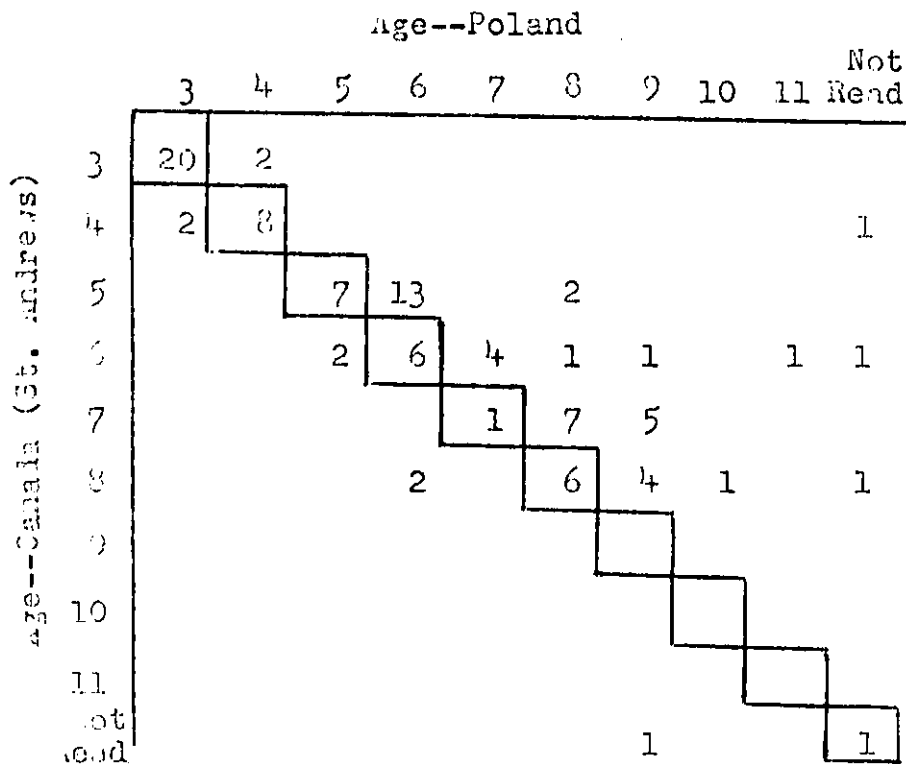
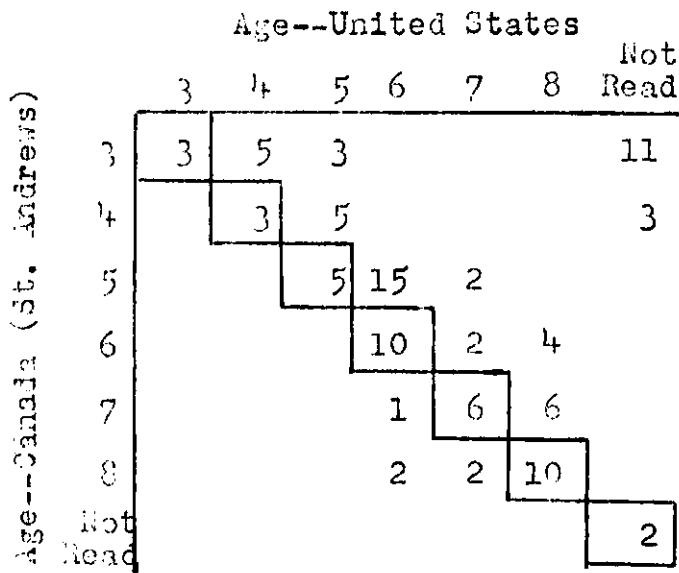
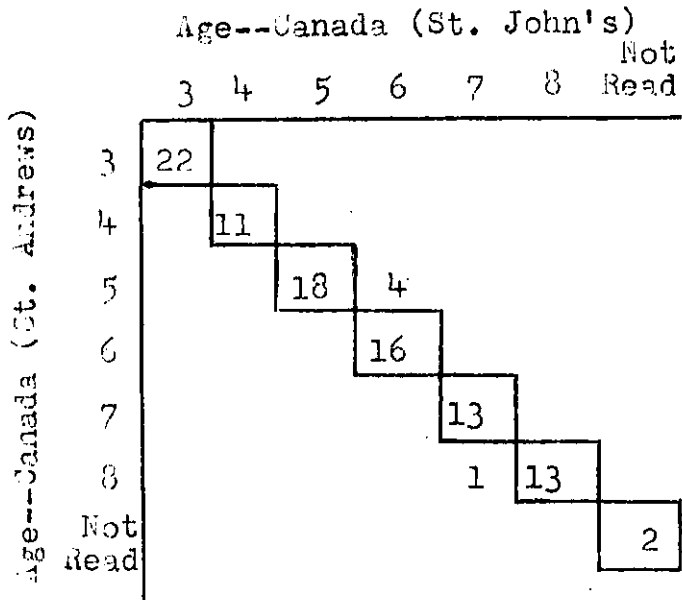
	3	4	5	6	7	8	Not Read
3	11	4					2
4	2	6	26	3	3		3
5		3	23	3	1		2
6			1	1	2	1	
7			1				
8							
Not Read							2

Age--Poland

	3	4	5	6	7	8	Not Read
3	13	1					
4		11	35	2	2		3
5		1	14	4	3	1	3
6			2		1		
7							
8							
Not Read				1			3

Sample No. 2
 Location: Georges Bank(Division (5Z)
 Date: December 7, 1966
 No. of fish: 100

Mean Age - (number of fish
 in brackets)
 Canada (St. John's) - 5.32 (98)
 Canada (St. Andrews)- 5.29 (93)
 United States - 6.16 (84)
 Poland - 5.83 (96)

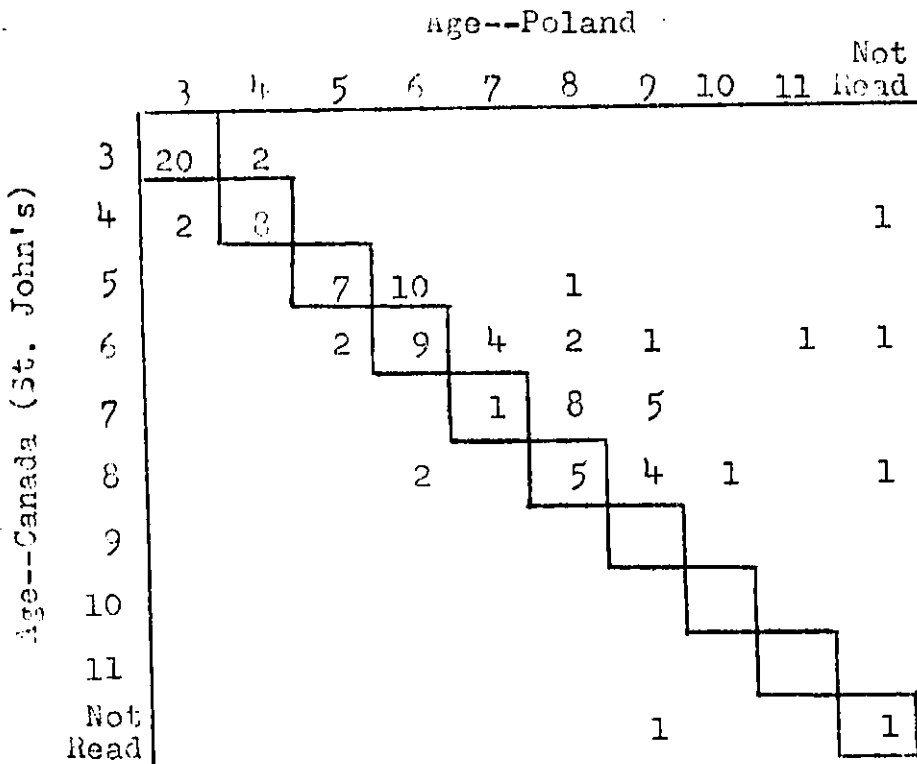
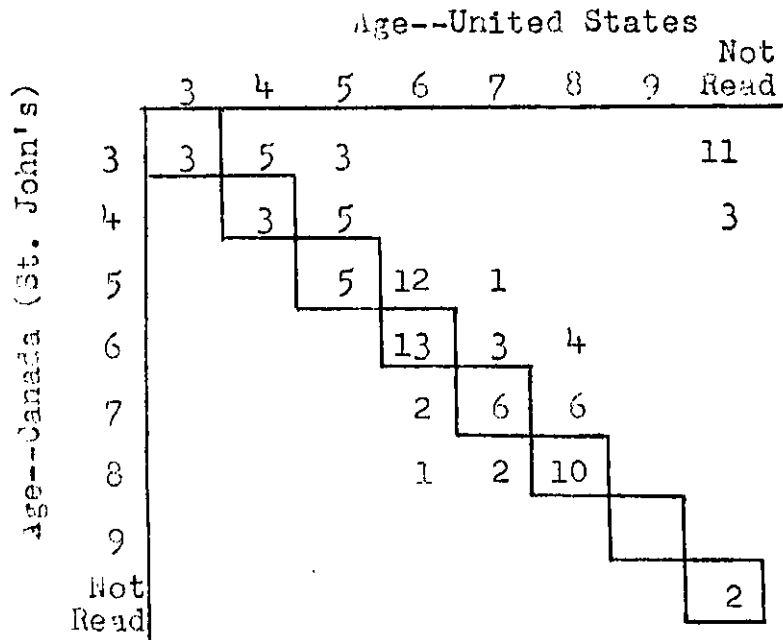


Sample No. 2 (continued)

Location: Georges Bank (Division 5Z)

Date: December 7, 1966

No. of fish: 100



Sample No. 2 (continued)
 Location: Georges Bank (Division 54)
 Date: December 7, 1966
 No. of fish: 100

