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(B.g.14)ANNUAL MEETING - JUNE 1971LENGTH AND AGE DISTRIBUTION OF ATLANTIC SALMON FROM THE OFFSHORE FISHERY
AT WEST GREENLAND 1970by Jens Møller Jensen
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The material to this paper derives from Mr. Ole Christensen (DFH), who observed the fishery on board the Danish drifter POLARLAKS from 29th August to 20th September.

The material for age analyses and sex determinations is collected in Divs. 1A and 1B from 30th August to 6th September. The material for the length composition is collected in Divs. 1A, 1B and 1E.

All measurements are in fork length and measured to the centimetre below.

Age distribution.

This material includes 387 samples, and the scale material was sampled stratified so that about 10 salmon in each centimetre could be analysed. Only the sea-age has been read and Table 1 gives the age distribution. The proportion of males in group A.1+ is increasing with the length. The table shows that the number of previous spawners is 10 corresponding to 2.58% of the 387 salmon. The sex ratio for the previous spawners is 4.0 ♀♀ to 1.0 ♂, in 1969 the sex ratio was 3.4 ♀♀ to 1.0 ♂.

The sex ratio.

Table 2 gives the length and sex for 980 salmon taken at random. The sex ratio is 2.6 ♀♀ to 1.0 ♂. Table 3 shows a comparison between the sex ratio from 1965-1970.

Table 3. The sex ratio in the years 1965-1970.

	♀♀	:	♂♂
1970	2.6	:	1.0
1969	4.9	:	1.0
1968	2.1	:	1.0
1967	2.8	:	1.0
1966	2.6	:	1.0
1965	3.5	:	1.0

The variation of the sex ratio from year to year, except in 1969, is not big.

The length composition.

The length frequency is given in Fig. 1 and Table 4. The material (3035 salmon) derives from the northern and southern part of West Greenland i.e. Divs. 1A, 1B and 1E.

Table 4 gives a sex and age composition, combined both from Tables 1 and 2, in the total material measured.

Table 1. Composition in sea-age and sex, from a sample of 387 salmon.

cm	A.1+		A.2+		PS	
	♀♀	♂♂	♀♀	♂♂	♀♀	♂♂
105					1	
94				1		
93			1			
92				1		
89			1	1		
88			2	1		
87			3			
86			6	2		
85			1	2		
84			8			
83			5	1		
82			11	2	2	
81			7		1	
80			8			
79			10	1		
78		1	10	1	1	
77		1	8	1	1	
76		4	4	1		1
75	1	5	2			
74		9				
73	4	6				
72	1	9			1	
71	4	7				
70	7	4				
69	7	4				
68	11	2				
67	8	3				
66	15	3				
65	17	3				
64	11	3				
63	7	4				
62	12	3				
61	15	1				
60	8	3				
59	7	5				
58	8	4				1
57	7	4				
56	9	3				
55	6				1	
54	7	5				
53	2	2				
52	2					
49	1					
Total	177	98	87	15	8	2

Table 2. Sex composition of 980 salmon taken at random.

cm	♀♀	♂♂
94		1
88	1	1
87	1	1
86	1	
85		2
84	3	2
83	1	
82	5	
81	3	
80	2	
79	3	1
78	6	1
77	2	
76	2	5
75	2	3
74		6
73	3	4
72	2	8
71	7	9
70	26	16
69	27	19
68	42	26
67	35	24
66	38	23
65	71	24
64	62	17
63	39	13
62	63	13
61	57	5
60	41	14
59	40	9
58	34	10
57	23	9
56	21	5
55	7	
54	7	5
53	2	2
52	2	
49	1	
Total	702	278

Table 4. Sex composition and sea-age combined from Tables 1 and 2. The average length is corrected by adding 0.5 cm.

cm	A.1+		A.2+		NK	TOTAL
	♀♀	♂♂	♀♀	♂♂		
94				2		2
89			1	1		2
88			2	1		3
87			3			3
86			4	2		6
85			2	3		5
84			5			5
83			4	1		5
82			13	2		15
81			14			14
80			14			14
79			8	3		11
78		1	6	1		8
77		1	8	2		11
76		6	6	3		15
75	2	8	3			13
74	25					25
73	11	8				19
72	3	23	3			29
71	29	38				67
70	56	35				91
69	88	61				149
68	118	73				191
67	125	86				211
66	185	74				259
65	218	73				291
64	222	61				283
63	172	57				229
62	185	39				224
61	154	14				168
60	134	45				179
59	109	25				134
58	95	28				123
57	63	25				88
56	50	12				62
55	15	14				29
54	17	12				29
53	5	4				9
52	5					5
51					5	5
50					2	2
49	1					1
47					1	1
Total	2087	823	96	21	8	3035
\bar{x} =	64.0	65.5	81.0	83.2	50.8	65.0 cm

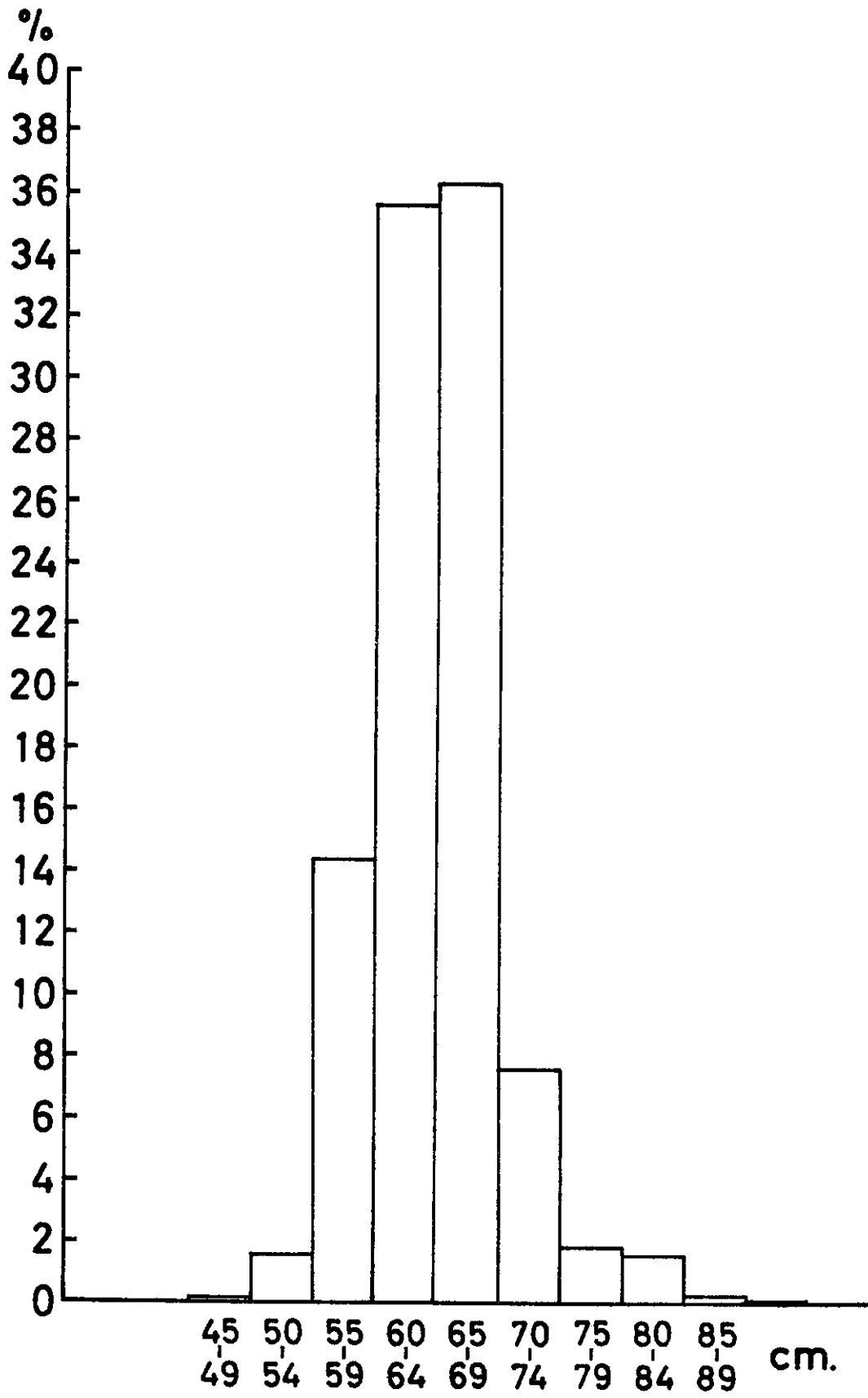


Fig. 1. The length composition of 3,035 salmon in 5-cm groups.