

6 GEORGE V, A. 1916

Table 4 gives the result of the study of some samples from Newfoundland. We meet here quite similar conditions; only the oldest year-classes seem to be represented by individuals of all sizes. Of the younger year-classes there are only a few individuals of all sizes. Of the younger year-classes there are only a few individuals which may belong to the larger part of their year-class. We find the 8-year old between 29 and 32, with an average of about 31 centimetres in length. The 9-year-old between 30 and 33, with an average between 31 and 32; the ten-year-old between 29 and 34; average a little over 31.

Table 5 contains an analysis of 151 herrings from the Magdalen Islands. This sample shows some few younger (4 to 6-year-old) herrings. It seems very unlikely that the younger individuals are by any means representative of their respective year-classes. Better results are obtained by the second method described above, namely, by using the figures from the calculated lengths of the individuals in their different periods of growth. Tables 6 and 7 give the figures obtained by this method for the three different types of herring. Table 6 gives the limits of variation. The reader will here be able to see within which limits of size the herrings of different types have been found. Of great interest for our purpose is Table 7, where the figures are given for the average lengths in different ages and the average yearly increment of growth, as they have been found by the study of the three samples. In the table letters l_1, l_2, l_3 stands for the length of the herrings, when they were one, two or three years old (or rather when their first, second, or third winter ring was formed). The letters t_1, t_2, t_3 stand for the increment of growth, which the herrings have had during the respective years of their life.

TABLE No. 5.—Magdalen Islands, Spring, 1914.

Cm.	Number of Different Year Classes.									All Year Classes.
	4	5	6	7	8	9	10	11	Over 11	
25	1									1
26	1									2
27	5	1								6
28	4	1								5
29			4	4	4	1	1			14
30			4	6	9	7	7	10	1	44
31			1	6	6	6	9	15	4	47
32					4	3	3	13	2	27
33								2	1	4
34										1
No. all sizes	11	2	9	16	23	17	20	41	12	151
Per cent all sizes	7.3	1.3	6.0	10.6	15.2	11.3	13.3	27.2	7.7	