

SESSIONAL PAPER No. 38b

reach maturity. No definite information could be obtained as to this, and it must therefore be left to future investigations, when the necessary facts in this respect can be collected. From the experience obtained through the European investigations it must be assumed that the two types of herrings, which have so much resemblance as to their rate of growth, may also reach their maturity at about the same age. If this is so, it must further be supposed that the spawning schools off the Newfoundland coasts in some years, in any case, must consist of large numbers of smaller and younger (4-, 5-, and 6-year-old fish), which to a great extent must go through the fishermen's nets and thus escape from being caught. This point, which obviously has great theoretical and practical importance, should be kept in view in any further scientific researches, as well as in practical fishing experiments, such as will undoubtedly have to be made in future. It would be of great interest if such experiments could be made, during the coming spring.

We will now, with all the precaution and reservation immediately arising from the considerations just urged, again regard the two tables (8 and 9) and especially draw attention to the comparison of the figures of the percentage for the older year-classes, which are represented in the samples in great numbers.

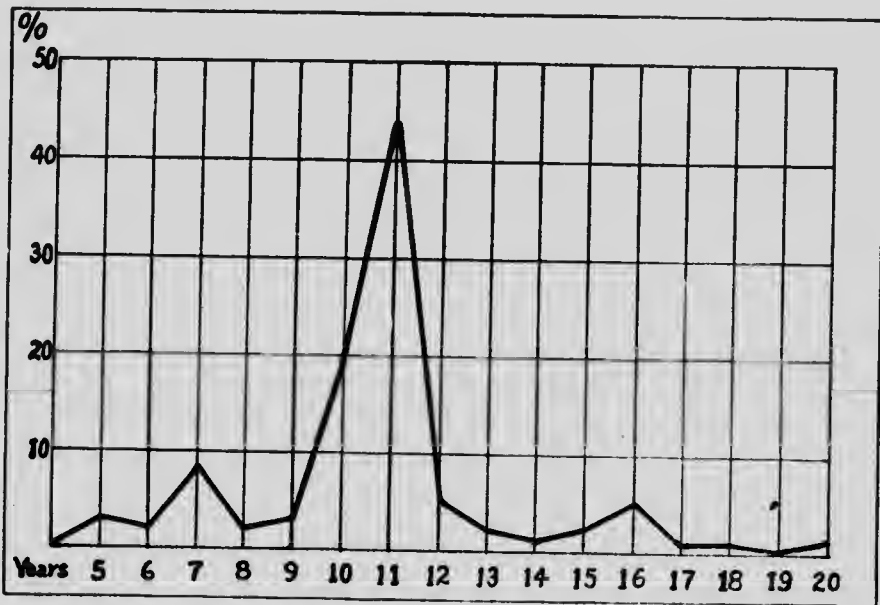


Fig. 16. Composition in point of age of fall herring from West Coast of Newfoundland (about beginning of November, 1914).

It may also be of interest to compare the two figures, 15 and 16, which are drawn on the basis of the figures contained in table 8 and 9. It will then be seen that the spring herring (table 9) for the greatest part consisted of three year-classes, the 9-, 10-, and 11-year old herring, amongst which the 10-year-old, born in the year 1904, predominated to such an extent that about half (44 per cent) of the total number of the individuals in the samples belonged to this single year-class. We have thus here again established the fact that great fluctuations occur in the number of the different year classes. Spawning schools of the Newfoundland herring resemble also in this respect the spawning schools of the Norwegian spring herring.