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Spent Herring from the Silver Pit.

By

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The Silver Pit is a locality of the North Sea situated South of the Doggerbank, at about 54° North latitude and between 2° and 3° East longitude of Greenwich. The depth is 60 to 70 m. Formerly it was much frequented by Belgian fishermen, but was almost abandoned in later years.

Five Ostend trawlers have been fishing the Silver Pit between February 1st and the end of March 1939 and we know that some boats from Germany and Holland have also been fishing on the same grounds. Samples of 30 herrings, with particulars about locality and time were obligingly given to us by the owners and sea captains¹).

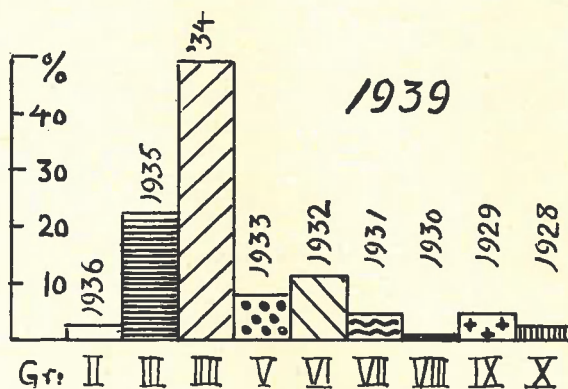
From twelve of the trawlings made by these boats 300 herrings were submitted to the usual 8 points of analysis.

The diagram shows a great similarity of this shoal of northern spents with that of our coastal southern ones. The rule of oscillation is complied with and the height of the columns in the lower part, on the right of the row, varies like the corresponding one in our diagram of coastal herrings for 1939²). The columns in the two diagrams, ascend and descend simultaneously. The two high columns of the age-groups, III and IV, show well the balancing effect—the percentage columns of the six older groups are obviously low because the columns of the two younger groups are so weighty.

The vertebrae were counted in all 300 specimens and the mean number was found to be 56.51. This very slightly polyspondylic mean is not based on a sufficient number of individuals to allow a serious discussion as to the affinities of the shoal. Other remarks lead to consider these herrings as related to the Bank herrings rather than to any polyspondylic group.

¹) These ships were: O. 119 of the firm Brunet et Cic.; O. 86 of the pêcheries-à-vapeur P. V.; O. 88 of the pêcheries-à-vapeur P. V.; O. 275 of the firm Walraevens; O. 342 of the firm Lambrechts.

²) See Appendix 15, Fig. 1, last step.



First step of biological scale of the Silver Pit shoal of spent herring. Febr.-March, 1939.

The presence of very small herrings in their 2nd year of age never occurs in the shoal of southern coastal spents and seems particular for the Silver Pit (See diagram).

We intend to follow the evolution of the shoal of the Silver Pit next year, if we see the possibility of obtaining material regularly, notwithstanding the long distance from Ostend and the variability of the fishing industry. Great interest attaches to the question of the origin and the destination of these herrings. Where are the spawning grounds they are coming from and the feeding grounds they are going to after the termination of their resting and fasting period at the Silver Pit?

These questions are not only of biological but also of practical interest: if the spawning ground of these spents was known, it would be possible to prognosticate for the coming year, not only a high percentage of 4 and 5-year-old units, but even a probability of a good fishing season in that region.