

Annales Biologiques 1962

Herring

INTRODUCTION

Contributions on the investigations of the herring fisheries and of the different stocks of herring in the north eastern part of the Atlantic and adjacent seas have been received from the following:

Belgium

Ch. Gilis

Denmark

K. Popp-Madsen

England

R.J. Wood

Germany

P.F. Meyer-Warden
K. Schubert

Iceland

J. Jakobsson

Netherlands

K.H. Postuma
J.J. Zijlstra

Norway

Finn Devold
O. Dragesund
O.J. Østvedt

Poland

K. Strzyzewska

Scotland

I.G. Baxter
G. McPehrson
B.B. Parrish
A. Saville

USSR

L.N. Lisivnenko
B.M. Tambovfsev

Several reports deal with the stocks of herring exploited in the North Sea and round the British Isles. These contributions provide information about herring and herring larvae in the central and eastern Baltic and in the White Sea and Barents Sea where the local population is mixed with Atlanto-Scandian herring. About the Atlanto-Scandian tribe Norwegian and Icelandic contributions are available for this year. According to the reports presented here the fishery in 1962 was not very successful on most of the traditional fishing grounds except Iceland.

The Norwegian west coast fishery was somewhat better last year than in 1961. This was not due, however, to increasing stock size but to better fishing conditions. The tendency for the delay in spawning and for the displacement of the spawning places to the north continued. The mean length and age of herring in the catches was very high again due to lack of recruitment. The fishery was mainly based on the extremely strong year-class 1950 now 12 years old fish which contributed 65% of the total landings by number and even more by weight. Exploratory cruises, the summer fishery north and east of Iceland and the results of the småsild and feitsild fishery off Northern Norway and of the fishery in the Barents Sea suggested that the year-class 1959 will be quite strong; the year-class 1960 seems to be a good one too but year-class 1961 is considered to be rather poor.

The Norwegian summer fishery off Iceland was predominantly based on old (year-class 1950) Norwegian herring. Later in the season immature herring of year-class 1959 gained some importance. - The Icelandic summer fishery on feeding herring off Iceland was the best ever recorded in the history. The high yield of 0.3 million tons landed by Icelandic boats can be attributed to an increase in the searching power and the efficiency of the fleet and to very good shoaling due to a rich food supply on the feeding grounds. The Icelandic catches consisted of almost the same amount of Norwegian spring spawners as Icelandic spring spawners. The distribution of Herring in summer has been investigated by a joint effort of research vessels from Iceland, Norway, and USSR. A joint report on the features of hydrography, plankton and herring has been delivered to the Herring Committee in October 1962.

Along the northern slope of the North Sea the herring fishery continued. In most of the catches the spring spawning component was greater than the autumn spawners. In the North Sea the yield of British, Dutch, German, and Belgium vessels was better in the Northern areas than in the Central and Southern parts. The Scottish drift-net fishery was successful in early summer off Shetlands and in the north eastern North Sea, while the German trawlers had good catches only in the western part of the Gut area. In the Fladen and Dogger areas the total yield and the catch per unit effort declined. The yield of the fishery in the Southern Bight and the English Channel dropped considerably compared with 1961. The data on the age composition of the stocks can be summarized as follows: -

- (1) year-class 1956 is still the dominant one on the northern grounds,
- (2) in the south including the Dogger year-class 1958 was predominant,
- (3) year-class 1959 was a very poor one both in the North and in the South,
- (4) year-class 1960 was fairly abundant in the autumn spawning herring caught on the feeding grounds of the NE-North Sea (Scottish data) and in the English Shields fishery and in the oil herring fishery on the Bløðengrund; but it was poor in the German catches on the Dogger and on the southernmost grounds.

For a better forecast of the recruitment more data from the different fisheries on adolescent herring are needed, as presented for the Bløðengrund and the Scottish waters. Length-age was very high in most age groups. Some information about the Scottish and the German fishery west of the British Isles are presented. They do not indicate the predominance of specific year-classes.

Data about the herring in the Western Baltic and its western approaches are not submitted. According to Polish investigations the year-classes 1959, 1957, and 1955 were relatively strong. The feeding conditions were better in 1962 than in 1961. The importance of the feeding conditions for the growth and the survival of larval and 0-group herring has been stressed for the spring spawning herring of the Gulf of Riga.