IN CONFIDENCE: Not to be quoted without reference to the Laboratory.

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CRUISE REPORT

F.R.S. "CLUPEA"

5th March-28th April 1964

Objectives

- (1) To study the production and subsequent dispersal of Clyde herring larvae.
- (2) To carry out a limited programme of hydrographic sampling.

Herring Larval Surveys

The first major hatching of herring larvae on Ballantrae Bank was observed on the 5th March with hatching reaching its peak about The numbers of recently hatched larvae appeared one week later. to be rather greater than in 1962.

Until the end of March, the main concentration of larvae continued to be centred on Ballantrae Bank with a limited dispersion to the south and west. Thereafter, there was evidence of a northerly shift of the major body of larvae which by the last week of the survey was situated on either side of Arran and around Cumbrae.

Double disc indicator samples, for investigation of the standing crop of organisms suitable as food for herring larvae, were taken regularly on Ballantrae Bank and at stations on Grids I and II where major concentrations of herring larvae were located. These samples are currently being analysed by the S.M.B.A. Oceanographic Laboratory, Edinburgh.

Hydrography

Drift bottles were released on Ballantrae Bank on each occasion it was surveyed.

Temperature and salinity samples were taken at surface and bottom at all stations on Grid II on the first occasion this survey Surface samples for phosphate, nitrate and silicate was done. analysis were also taken.

A. Saville

I. G. Baxter G. McPherson

D. P. Sharman

11th May, 1964.