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CRUISE REPORT

F.R.S. 'CLUPEA'

13th March - 13th April 1961

Objective

To continue the study of the production of herring larvae on Ballantrae Bank and their subsequent dispersal.

General

The cruise was shortened by a week when 'Clupea' had to return to Buckie to go on the slip because of trouble with the propeller shaft and the stern tube.

Distribution of larvae

- 1st week: Large numbers of larvae were found on Ballantrae Bank especially on the north edge. There was little evidence of drift off the Bank.
- 2nd week: The larvae had dispersed over a wider area up to the south of Arran.
- 3rd and 4th week: The larvae were now dispersed generally over the Firth of Clyde.
- 5th week: The larvae were still dispersed generally but the presence of small larvae some with yolk-sacs on Ballantrae Bank indicated a fresh hatching.

Hydrography

Drift bottles were released on Ballantrae Bank each time the bank was surveyed and the returns indicate movement to the south during the early part of the cruise and movement to the west and north during the later part.

Temperature and salinity samples were taken surface and bottom during one complete survey. Surface temperatures ranged from 6.46° to 10.74°C and bottom temperatures from 7.48° to 10.90°C.

Temperature, salinity, oxygen and phosphate samples and bathythermograph readings were taken for the Port Erin Biological Station on lines from Ireland to Mull of Kintyre and across to Clyde.

Echosounding

No dense concentrations of herring plumes were found.

G. McPHERSON  
D. P. SHARMAN

8th June, 1961.