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CRUISE REPORT F.R.V. "CLUPEA"

20th-25th February, 1961.

The cruise was shortened by half on account of the prolongation of the vessels refit. Hence work was somewhat restricted in extent. The main objectives were attained however, largely due to the weather which allowed work to continue steadily though gale force offshore winds occurred at times, rendering some operations very difficult.

1. An adequate supply of herring and roundfish was taken by trawl and landed in good condition at Cairn Ryan for behaviour experiments.
2. Samples of ripe and running herring were taken by trammel nets for physiological experiments at Cairn Ryan. The condition of these fish was not however as good as the trawl caught fish.
3. A larval and hydrographic survey of the bank was carried out on the 24th February. No larvae were found.

The temperature conditions were similar to last year. In the attached figure is shown the ranges of temperature found at surface and bottom on Ballantrae Bank since the operations began in 1957. Note that in 1957 only one station was available. In other years the bank was surveyed in extenso. The temperatures refer to the period from the last week in February to the first week in March.

4. Some 2,200 photographs were taken near the bottom in the vicinity of the spawning grounds. Of these about 200 exposures showed fish - mostly in large numbers. The information will be reviewed.
5. A number of cine films were exposed at various times near the bottom, but these did not yield pictures of fish.
6. A single sound recording was made of the passage of the trawl over the sea bed. The sound intensities were very low in comparison with the last recording of this kind.

R. E. CRAIG.

27th March, 1961.

