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Cruise Report

7 ER75

FRS EXPLORER

2 September - 14 October 1975

## <u>Objectives</u>

- 1. A herring larval survey off the west coast of Scotland and the north coast of Ireland, using the Dutch Gulf III high-speed sampler.
- 2. A surface plankton survey using the Hardy Plankton Indicator.
- 3. To deploy 2 current meter moorings at the bottom of the continental slope west of Shetland.

'Explorer' sailed from Aberdeen on 2 September and proceeded to lay the current meters west of Shetland. This task was completed by mid-day 4 September and the larval survey was started the same evening at the North west corner of the survey area. Ninety-two stations to the north of Butt of Lewis and Cape Wrath, down the west side of the Hebrides and on the lines south of Barra Head were completed before mid-afternoon on 10 September when 'Explorer' left for Stornoway to land Messrs Dooley and Henderson. 'Explorer' sailed again in the morning of 12 September but had to go to anchor when the engineer's reported a bearing running hot. After repairs the ship set off again in the late evening but it was considered advisable to restrict the top speed to 9 knots. The survey was restarted, where it had been discontinued, at mid afternoon on 13 September and continued (with a break of 17 hours dodging in heavy swell) for another 29 stations down to the north coast and part way down the west coast of Ireland before work had to stop for the mid-cruise break. 'Explorer' berthed in Greenock in the morning of 17 September, for the mid-cruise break.

'Explorer' left Greenock again at 1315 on 23 September and after clearing the Clyde and reaching the Irish Coast had to "dodge" until the following morning because of heavy weather. Two outlying stations from the previous grid were completed, but continuing gales prevented further work and 'Explorer' again had to "dodge" until the next morning when the grid was resumed. The remaining 14 stations of the first grid had been completed by the 26 September and 'Explorer' made for the Sound of Mull and entered the Minch.

Stations were resumed opposite Ru Stoer at 0835 on 27 September and 'Explorer' worked the upper portion of the grid initially and then the lines to the west of the Butt of Lewis. At 1905 on 29 September 'Explorer' had to break off due to bad weather and return to the Minch until the weather improved. 13 stations in the North Minch were completed and at 1940 the next day work was resumed west of the Hebrides. 59 stations had been completed without incident when at 0420 on 4 October work had to be abandoned due to heavy seas. 'Explorer' "dodged" overnight and as the weather had not improved the following day made for Stornoway where she docked at 1300-for the mid-cruise break.

'Explorer' left Stornoway at 0930 on 7 October and immediately resumed the grid in the South Minch and then continued working in a southerly direction. The grid was completed by 2330 on 10 October and 'Explorer' steamed for Barra Head. A block of stations was repeated up the west side of the Hebrides and along to Cape Wrath. 40 stations had been completed in this area by 1100 on 13 October and 'Explorer' sailed through the Pentland Firth and finally docked in Aberdeen at 1100 on 14 October.

## Results

A) 348 oblique hauls were made with the Dutch Gulf III high speed sampler and samples were returned to the Laboratory for analysis.

Concentrations of larve were noted:-

- 1. From Cape Wrath to the Butt of Lewis.
- 2. Down the west side of the Hebrides from the Flannans to South Uist.
- 3. From Colonsay to Malin Head.
- B) 116 night hauls were made with the Hardy Plankton Indicator for IMER, Edinburgh

G McPherson J A Morrison 22 October 1975

Seen in draft by J Main - 1st Off: