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Not to be cited without prior reference to the Laboratory

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FRV "Goldseeker"

6GR87

Cruise 6/87

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# Report

Part 1 11-23 May 1987

## Personnel

P W Rankine

SO (in charge)

I Gibb

ASO

# Objectives

- To carry out a series of larval surveys over Ballantrae Bank and adjacent areas to obtain estimates of herring larval production.
- 2. To carry out a series of hydrographic surveys to establish a temperature/salinity profile of the area.
- 3. To identify any fish traces observed around the bank by trawling.

## Narrative

FRV "Goldseeker" was delayed in Troon until 13 May owing to a north westerly gale. A larval survey was then carried out in the Ballantrae Bank area, in very heavy weather conditions. During 14 and 15 May the survey was extended southwards to the area around Corsewall Point. The first half landing was then taken on 16 May.

Hydrographic and grab surveys were carried out on 17 and 18 May and a further larval survey carried out over Ballantrae Bank on 19 May. The second half landing was taken the following day. North westerly gales prevented sampling at Ballantrae on 21 and 22 May. Flowmeter calibrations were therefore carried out at the measured mile off Arran during this period. Scientists left the vessel in Troon on the morning of 23 May.

#### Results

The larval surveys indicated that there was no larval production on Ballantrae Bank during the survey period. The grab survey showed that the egg mat identified during the previous survey had disappeared, only dead eggs and empty egg cases being found in that area. Bottom water temperatures on the Bank during the survey were around 8°C. At this temperature, and in view of the developmental stages of eggs observed on the previous survey, larval production had been expected during at

least the first week of this survey. The results indicate, therefore, that a considerable egg, and perhaps larval, mortality had occurred in the period between surveys ie between 29 April and 12 May.

Larvae from previous hatchings were identified in the area to the south of Corsewall Point indicating a southerly drift of larvae from the Bank, out of the Clyde Sea area.

No significant fish traces were observed around the Bank.

Normal contact was maintained with the Laboratory.

Paul Rankine

18 June 1987

Seen in draft: D Findlay

