

R1/12

In Confidence - Not to be quoted without prior reference to the laboratory

FRV SCOTIA

Cruise 5/82

REPORT

12 May - 1 June 1982

5SR82

### Objectives

1. To undertake a demersal fish survey of Rockall Bank and on the adjacent continental shelf.
2. To deploy current meter moorings near Rockall Bank.
3. To track parachute drogues in the vicinity of these moorings.
4. To collect hydrographic and plankton samples over and in the vicinity of Rockall Bank.
5. To obtain specimens of Geryon affinis north of Rockall.

### Narrative

SCOTIA sailed from Aberdeen at 17.00 on 12 May and reached the Rockall area by noon on 14 May. The initial intention to deploy a current meter mooring to the west of Rockall had to be abandoned because of unsuitable weather and instead five trawl stations to the north of Rockall were worked. A current meter mooring was deployed to the north of Rockall during the morning of 15 May. During the remainder of this day and the following day further trawl stations were worked and a plankton survey was conducted overnight. An attempt to lay a current meter mooring on the eastern slopes of Rockall Bank on 17 May failed because of the presence of a 70 metre high cliff spanning the 600m contour; the chosen depth for the mooring. After failing to find a suitable mooring site in the vicinity, one trawl station was worked at the eastern edge of the Bank later that day immediately prior to the commencement of the passage to Greenock. One hydrographic station was worked in the Rockall Trough on 18 May.

SCOTIA arrived at Greenock at 09.00 on 19 May and departed at 10.00 on 21 May. The ship anchored for a five hour period in Campbeltown Loch later that day in order to effect repairs to an engine. Hydrographic and trawl stations were worked over the southern part of the Bank on 23 May. On 24 May renewed attempts were made to deploy a mooring on the eastern slopes of the Bank but this had to be abandoned once again, this time because of poor weather. Trawl stations, and hydrographic and plankton stations were worked and a line of deep water creels was deployed in the area to the east of Rockall. The Rockall East mooring was deployed on 26 May at a new location.

Unfortunately, for an unknown reason, the acoustic release was activated shortly after deployment and the mooring therefore had to be immediately recovered. The ship then proceeded west to deploy the Rockall west mooring, working trawl stations on the way. This mooring was deployed on 27 May without incident. The Rockall East mooring was finally deployed on 28 May and after working a final trawl station, a hydrographic section from Rockall Bank to George Bligh Bank was commenced. Bad weather prevented the completion of this section before SCOTIA had to commence her passage to Aberdeen on 29 May where she docked at 17.00 on 31 May.

## Results

### 1. Trawling

Haddock predominated in each of the 25 hauls made within the 200m depth contour. The average catch rate of haddock was 13.6 baskets per hour (range 4-27), mostly comprising young fish of the year classes of 1980 and 1981, both of which were well represented all over the Bank. The majority of these fish were below the minimum legal landing size and catch rates of commercially exploitable haddock tended to be low, of the order of 1-10 baskets per hour.

Three hauls were made in the depth range 250-300m. On two occasions the net was badly damaged by coral but the third haul yielded a catch of 94 baskets of blue whiting. Strong echotraces, probably representing blue whiting, were recorded close to the seabed in depths of 250-300m along the eastern and northern edge of the Bank but not to the west.

Approximately 350 haddock were weighed at sea to obtain the relationships between length and both total and gutted weight. Samples of saithe and halibut flesh were collected on behalf of the chemistry section and six samples of whole, frozen haddock were collected for parasitological investigations.

### 2. Hydrography

A total of 29 water bottle and CTD stations were worked. This number fell far short of that planned mainly because of the great deal of additional time required to deploy the current meter moorings. These moorings are due for replacement during SCOTIA cruise 12/82 in November.

### 3. Plankton

Large concentrations of haddock eggs and larvae were collected at some of the 13 plankton stations worked over the Bank.

### 4. Crabs

A fleet of 10 deep water creels was deployed on 25/26 May on the north eastern Rockall Bank slope. This yielded one Geryon affinis which has been returned alive to the laboratory.

### 5. Computing

The shipborne computer was used for navigational purposes and functioned reliably throughout the cruise.

Seen in draft:

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17 June 1982

