

R1/12

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FRV *Scotia*

Cruise 0395S

REPORT

7 February - 1 March 1995

Personnel

A W Newton	SSO
K A Coull	HSO
F Armstrong	HSO
G I Henderson	SO
P Clark	ASO
C G Davis	ASO
D J Tait	ASO
G Petrakis	Visitor

Objective

To take part in the ICES International Bottom Trawl Survey in the North Sea.

Narrative

Scotia sailed at 1030 hours on Tuesday 7 February and immediately began survey work off Aberdeen. For the rest of the week the weather was favourable and work was carried out round the clock until Sunday when a severe gale curtailed activities. Operations resumed on Monday but continuing bad weather hampered the survey. A 24 hour call was made in Stavanger on Friday/Saturday (17/18 February). Events after Stavanger can only be described as frustrating. Severe gales continued to restrict scientific operations; *Scotia* had to steam to a port in the Moray Firth to land one of the ship's officers for personal reasons and there were two major engine room failures. Finally the vessel was forced to return to Aberdeen for urgent repairs on Thursday 23 February. The repairs being effected *Scotia* sailed again from Aberdeen on 27 February with a two day extension to the cruise. Work commenced in the outer Moray Firth but after four hauls the port trawl winch motor was damaged and again *Scotia* was forced to return to Aberdeen. The final docking was at 1800 hours on Wednesday 1 March.

Results

A total of 46 one hour hauls were made using the GOV trawl. During the first part of the survey the ground gear consisted of the standard set of 152 mm rubber discs but the discs were replaced with 305 mm bobbins for the stations in the northern part of the North Sea. Short (60 m) sweeps were used for all tows. Each haul was monitored for headline height, wingend and door spread and the speed of the net through the water.

Table 1 shows the preliminary indices for the principal species sampled during the survey. The index is based on the numbers of fish per hour caught below a length selected as a probable upper delimiter of 1+ fish. These indices are liable to some revision after the ages of the various species are confirmed. Initial analysis of the data show that herring recruitment is below the average for the last five years whereas haddock are showing the highest number of recruits since 1970.

Sixty-six hauls were made with the Methot trawl in order to obtain an estimate of the number of pre-metamorphosing herring larvae. These samples are still being analysed.

Top and bottom temperatures, salinities, phosphates, nitrates and silicates were taken at all trawling stations.

A W Newton
3 April 1995

Seen in draft: P Ramsay

Table 1

Indices of 1+ fish from recent International Bottom Trawl Surveys

Year	Herring	Cod	Haddock	Whiting	Norway pout	Mackerel
1995*	1,883	10.6	1,323	584	5,726	0.3
1994	2,416	14.8	229	726	1,868	2.3
1993	1,995	12.7	1,242	1,087	2,681	1.0
1992	2,099	13.0	1,115	916	5,121	16.0
1991	2,433	2.4	679	1,014	2,497	6.9

* Provisional, based on length distributions only.

Track Chart of FRV 'Scotia' 7/2/95 - 1/3/95

