

R1/12

Not to be cited without prior reference to the Marine Laboratory, Aberdeen

FRV *Scotia*

Cruise 0396S

REPORT

7-26 February 1996

Personnel

A W Newton	SSO
D C Emslie	SSO
F Armstrong	SO
G I Henderson	SO
D Beveridge	SO
C G Davis	ASO
M Mathewson	ASO
F Burns	CON
J Drewery	CON

Objective

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

Narrative

Scotia sailed from Aberdeen on Wednesday 7 February but the departure time was delayed by 2½ hours due to bad weather. On departure, work was attempted off the Scottish east coast but severe storms restricted working opportunities and the weather did not improve sufficiently to allow a full day's work until Sunday. *Scotia* worked steadily eastwards but was dogged by bad weather; with the forecast of more severe storms the vessel took the opportunity to call at Stavanger on Friday 16 February. Sailing on Saturday *Scotia* encountered more storms and dodged for 2½ days off the Norwegian coast before the survey could re-commence. The weather improved sufficiently in the latter part of the cruise to allow all trawling stations to be completed. Unfortunately the weather was not good enough to deploy the Methot net throughout the whole survey area. *Scotia* docked in Aberdeen on Monday 26 February.

Results

A total for 45 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 has recovered after the previous two poor years; however, the main demersal species exhibit disappointing indices and in particular the 1995 haddock year class is worryingly low.

Fifty-eight 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
19 March 1996

Seen in draft: Capt J Nichols

Table 1

Indices of 1+ fish from recent International Bottom Trawl Surveys

Year	Herring	Cod	Haddock	Whiting	Norway pout	Mackerel
1996*	2,463	4.3	280	524	2,083	12.6
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	1087	2,681	1.0
1992	2,099	13.0	1,115	916	5,121	16.0

* Provisional, based on length distributions only.

Track Chart of 'Scotia' Cruise 0396S 7 - 26 February 1996

