

R1/12

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FRV *Scotia*

Cruise 0192S

## REPORT

30 January-19 February 1992

### Personnel

A W Newton	SSO
R D Galbraith	HSO
G I Henderson	SO
N S Collie	PTO
K J Peach	ASO
C G Davis	ASO
D J Tait	ASO
M C Donald (Ms)	ASO
B Williams (Dr)	Visitor
T Barton	Visitor

### Objective

To take part in the ICES International Young Fish Survey in the North Sea.

### Narrative

*Scotia* sailed at 1000 on Thursday 30 January and proceeded to stations off Aberdeen. For the next eight days steady progress was made in completing stations in the southern part of the survey area although there were a series of minor delays due to weather and mechanical problems. *Scotia* docked in Stavanger on 8 February and sailed again on 9 February. Bad weather restricted work and then engine problems forced the vessel to return to Aberdeen Bay so that shore based engineers could help solve the problems with the main engines. Repairs were effected and work resumed in the Moray Firth and Orkney region. Further bad weather and continuing mechanical problems dogged the vessel until *Scotia* docked in Aberdeen on Wednesday 19 February.

### Results

A total of 58 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 (47 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. In addition, turbidity, light levels and bioluminescence were measured at the fishing depth for every haul.

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. The preliminary data indicate that herring continue to maintain the level of recruitment experienced over the last couple of years and that there may be grounds for cautious optimism for stronger cod, haddock, Norway pout and mackerel year classes.

Forty five hauls were made with the Isaacs-Kidd mid water trawl.

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

A W Newton  
14 April 1992

Table 1

Indices of 1+ fish from recent Young Fish Surveys

Year	Herring	Cod	Haddock	Whiting	Norway pout	Mackerel
1992*	2158	14.3	1072	766	4964	16.7
1991	2433	2.4	679	1014	2497	6.9
1990	2146	3.4	219	509	1320	35.0
1989	3468	13.1	210	1465	2079	1.1
1988	4192	3.6	92	394	127	1.2

\* Provisional, based on length distributions only.

Track Chart for 'Scotia' 30/1 - 19/2/92 01925

