

R1/12

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FRV *Scotia II*

Cruise 0598S

REPORT

20 March - 28 March 1998

Loading: Aberdeen**Unloading:** Aberdeen**Personnel**

W R Turrell	PSO
R Payne	HSO
G Slessor	HSO
P Gillibrand	HSO
R D Adams	SO
P Barkel	PTO
L Bullough	Student
S Flerning	Glasgow University
Ms J Kerr	Aberdeen University
Ms Henderson	Aberdeen University
C Gough	Aberdeen University

Gear

Beam trawl, Aggasiz trawl, Fish traps, Underwater TV gear

Objectives

1. To perform hydrographic surveys along the standard Faroe-Shetland Channel sections.
2. To perform experimental deep water beam trawls, TV observations and grab stations northwest of Shetland.
3. To perform repeat 24 hour fish trap deployments northwest of Shetland.
4. To perform exploratory hauls for salmon post-smolts at the shelf edge (if time permits).
5. To perform hydrographic surveys along the JONSIS standard section and in the northern North Sea if time permits.
6. To collect samples of meso-pelagic fish for heavy metal analysis.
7. To collect the Fair Isle caesium sample

Out-turn days per project: 9 days BKC1

Narrative

After an initial delay due to an adverse tide followed by a failure of the bow thruster, *Scotia II* sailed at 1930 hours on Friday 20 March, and proceeded to the eastern end of the JONSIS hydrographic station. Work along this section commenced at 1000 hours on Saturday 21st, and was completed by 2230 hours later that day. *Scotia II* then proceeded to the start of the Nolso Flugga section, where work commenced at 0940 hours on Sunday 22 March. By 2300 hours the weather had deteriorated, and work was abandoned. During the following day a few weather windows permitted just three stations to be completed, but by 0800 hours on Tuesday 24th the weather had fully moderated, and work re-commenced. The Nolso Flugga section was completed by 1200 hours that day.

Scotia II then proceeded to the start of the Fair Isle Munken section, where work commenced at 1630 hours on Tuesday 24 April, and the survey of this section was completed by 1430 hours the following day. *Scotia II* then returned to the 600 m depth contour, where the first fish trap was deployed. However, during the passage to lay the next trap, at approximately 1905 hours on Wednesday 25 March, the after propulsion motor failed and *Scotia II* was left without propulsive power. She attempted to make way to shelter under her bow thruster alone, as repairs proceeded. By 0800 hours on Thursday 26 March the engineers succeeded in getting the remaining propulsion motor to run. As at that time severe force 9 gales were forecast, and the vessel had only half power, it was decided to maintain course for shelter. Later that day a decision was made to cancel the remainder of the trip so that *Scotia II* could return to Aberdeen for repairs. As at that time *Scotia II* was approximately 40 nm from the fish trap already layed, and after consideration of the poor forecast, it was decided that it was not possible to return and lift the mooring. *Scotia II* proceeded to head for Shetland. By 1400 hours the wind had increased to force 7, and by 2300 hours force 8-9 winds were experienced, and shelter was sought behind Fetlar. By 0400 hours the following day *Scotia II* resumed passage to Aberdeen, where she arrived at 0900 hours on Saturday 28 March.

Results

Unfortunately the mechanical problems on *Scotia II* resulted in only the hydrographic component of the cruise being completed. The three standard sections were successfully surveyed, and all data and salinity samples processed on board. In general conditions were normal for the time of year. The very low salinities previously observed at intermediate depths in the Faroe Shetland Channel were no longer present.

W R Turrell
9 September 1998