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FRV *Scotia*

Cruise 0806S

## **REPORT**

16-30 May 2006

### **Personnel**

D Reid	(SIC)
K Peach	
R Kynoch	
F Burns	
K Summerbell	
F Griffin	(visitor IMI)
M O'Sullivan	(visitor IMI)
H Philps	(student)
L Allan	(student)

### **Objectives:**

1. To carry out comparative fishing trials using different ground gear configurations on the BT137 GOV trawl.
2. To record all gear geometry using Scanmar, bottom contact sensors and load cells.
3. To work up all catches as per standing IBTS instructions.

**Out –turn Days per Project:** MF0354 – 15 Days.

### **Narrative**

*Scotia* sailed from Aberdeen at 1230 hours on 16 May and immediately carried out test tows of both gears (GOV BT137 with 'C' & 'D' ground gears) in Aberdeen Bay. These were completed successfully and the vessel then proceeded to the Rockall Bank to carry out the main trials. *Scotia* arrived at Rockall at around 0500 hours on 18 May. The initial four tows at two locations were carried out to decide on a 30 or 15 minute tow duration. Catch rates indicated that a 30 minute tow was appropriate, and this was used thereafter. The vessel then continued to fish following the experimental programme designed for this survey. This entailed carrying out two tows at each station. Paired tows were either with the same gear to quantify the disturbance effect, or with the two gears sequentially to quantify the gear effect. Tow locations were taken from previous Rockall surveys. Ten tows were carried out per day over a 10 day period

Trials were completed at 1130 hours on 28 May, after which the vessel proceeded to Aberdeen, arriving at approximately 0000 hours on 30 May.

## Results

A total of 104 tows were carried out during the survey. A map showing the tow positions is presented in Figure 1. The first two were simple test tows in Aberdeen Bay and were not allocated numbers. All subsequent tows were at Rockall and were allocated numbers and fully worked up. One pair of tows were carried out using 15 minutes not 30, and these will not be included in the analysis. 100 tows were carried out for the calibration study, 50 with ground gear C and 50 with ground gear D. All tows were carried out in pairs with either the same or different ground gears. In total, there were 8 pairs with a CC configuration, 8 with DD, 17 pairs with C followed by D and 17 pairs with D followed by C.

The main species caught were haddock, Norway haddock (*Sebastes viviparous*), lemon sole megrim, and blue whiting, although a range of other species were also caught in lower numbers.

The data will be analysed in depth at FRS and at present no conclusions should be drawn about catchability for the two net configurations. It is possible to say that the net rigged for ground gear D proved more robust in operation and required far fewer repairs than the C rig. Full results will be prepared for a paper and presentation at the Boston 'Fishing Technology in the 21<sup>st</sup> Century' conference in November 2006.

D G Reid  
9 June 2006

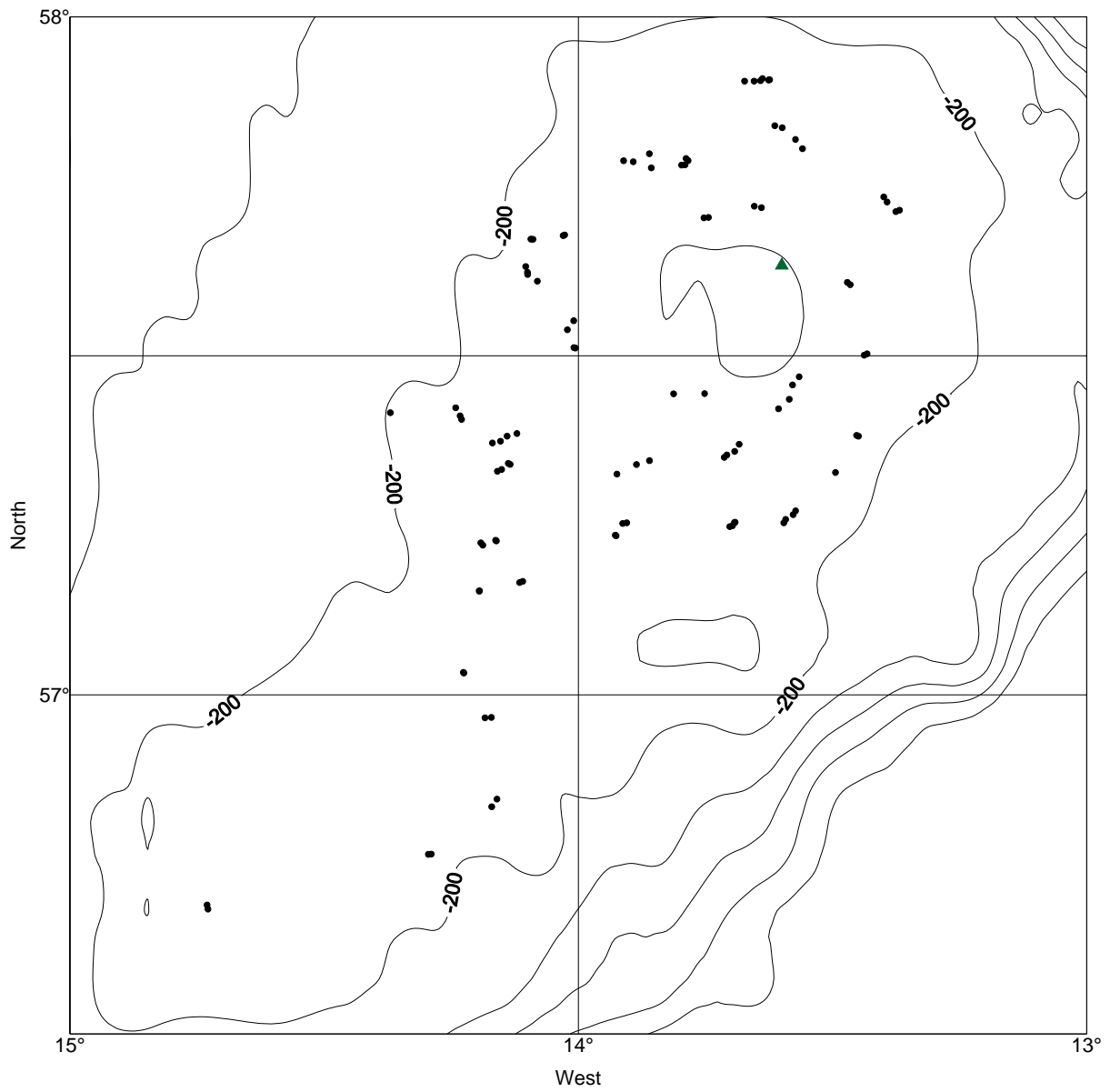


Figure 1. Tow positions and depth contours for survey 0806S on Rockall Bank in May 2006.