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FRV *Scotia*

Survey 1411S

## **PROGRAMME**

6-16 November 2011

### **Ports**

**Loading:** Aberdeen, 3 November 2011

**Unloading:** Aberdeen, 16 November 2011

**In setting the cruise programme and specific objectives, etc the Scientist-in-Charge needs to be aware of the restrictions on working hours and the need to build in adequate rest days and rest breaks as set out in Marine Scotland's Working Time Policy (Lab Notice 34/03). In addition, the Scientist-in-Charge must formally review the risk assessments for the cruise with staff on-board before work is commenced.**

In the interest of efficient data management it is now mandatory to return the Cruise Report, to I Gibb and the Cruise Summary Report (old ROSCOP form) to M Geldart, within four weeks of a cruise ending. In the case of the Cruise Summary Report a nil return is required, if appropriate.

### **Personnel**

R Kynoch (SIC)  
F Burns  
J Drewery  
E Armstrong  
L Ritchie  
D Bova  
N Collie  
C Hepple  
J Mair  
P Copland  
M Montgomerie (Visitor, SEAFISH)

**Project:** 10839 (SU02n) (11 days)

### **Fishing Gear**

Top drum: GOV trawl (BT137) rigged with floats only  
Lower drum: GOV trawl (BT137) rigged with ground gear D

### **Objectives**

1. Comparative fishing trials using GOV trawl (BT137) rigged with rockhopper ground gear D to assess the effect on survey catches of using long (97m) or short (47m) sweep lengths.
2. To test new polyvalent trawl doors (P17 and P18) to assess issues relating to overspreading during cruise 0911S.

3. To obtain under water TV footage of ground gear contact, adjuster chain assembly and mid-bridle orientation.
4. To carry out instrumented gear measurements using self contained load-cells to assess bridle loads and net drag.

### **General**

Loading of the trawl gear and scientific equipment will take place on 3 November. One BT137 rigged with floats only on the top net drum and the other BT137 rigged with floats and ground gear D onto the lower net drum. *Scotia* will sail on 6 November and after required drills, weather permitting, carryout hauls at the Buchan Deeps to test the performance of the new polyvalent doors P17 and P18. Depending on results if the doors are found to be over spreading then the vessel will make passage to sheltered waters to change over to alternative doors P15 and P16. However, if the door trials go successfully then the vessel will proceed north to fishing grounds around the Shetland Islands. Weather conditions at the time will determine the exact start area. Trawling operations will be conducted from 0700 until 2100.

### **Fishing**

The plan is to divide the working day into two parts with instrumentation and/or TV observations running from 0700 to 1300 and then catch comparison hauls for the remainder of the fishing day.

During the instrumentation hauls the tow procedure will consist of blocks (15 minute periods while towing at constant rpm) for three different speeds. Once the 15 minute blocks have been completed for each speed the vessel will turn and the same procedure repeated in the reciprocal direction. Prior to turning the gear will be hauled until the rockhoppers are on the deck and once turned the gear redeployed. The codlines will be open during these hauls and the number of speed ranges will be dependant on the prevailing weather. TV observation hauls will be approximately 30 minutes long.

Catch comparison hauls made to assess sweep length effect will consist of 30 minute tows as per standard GOV survey protocols. The hauls will be paired (long v short sweep or short v long sweep) and both paired hauls must run along the same fishing track. A sweep extension will be used to extend the 47m sweep out to 97m and rigged in consultation with the Fishing Master prior to sailing to simplify the change over. The aim to keep the pattern, timing and environmental factors (daylight/dark periods) as constant as possible between the first and second tow in each set of paired hauls.

*Scotia* will return to Aberdeen on the morning of 16 November.

Normal contacts will be maintained with the Laboratory.

Submitted:  
*R Kynoch*  
07 October 2011.

Approved:  
*I Gibb*  
26 October 2011

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FRV Scotia

Cruise 1411S

6-16 November 2011

**PROGRAMME AMENDMENT**

J Mair will not be joining the vessel for survey 1411S.

I Gibb

01 November 2011