

Not to be cited without prior reference to Marine Scotland, Marine Laboratory, Aberdeen.

MRV Scotia

Survey 0214S

## **PROGRAMME**

24 January – 14 February 2014

### **Ports**

**Loading:** Aberdeen, 21 January 2014

**Sailing:** Aberdeen 24 January 2014

**Half landing:** Lerwick or Aberdeen, (flexible)

**Unloading:** Aberdeen, 14 February 2014

In setting the survey 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 survey with staff on-board before work is commenced.

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

### **Personnel**

F Burns	SIC
R Kynoch	(Deck)
L Ritchie	(MIK)
R Cairns	
E Barreto	
A Edridge	
E Lines	
M Gault	(Part 2)
C Cronin	JNCC (Part 1)
R Combes	JNCC (Part 1)
C Pollack	JNCC (Part 2)
P French	JNCC (Part 2)

**Out-turn days:** 22 days, RV1401

### **Fishing Gear**

GOV Trawl (BT 137) with ground gear A & B  
Methot Net (Round Frame with IK depressor)

### **Objectives**

1. To complete an internationally coordinated demersal trawling survey in the North Sea in ICES area IV.

2. To obtain temperature and salinity data from the surface and seabed at each trawling station using a SEABIRD 19+ CTD.
3. Collect additional biological data in connection with the EU Data Collection Framework (DCF).

### **Trawling**

Hauls of 30 minutes duration will be made using the GOV trawl. Wherever possible, fishing will be carried out during daylight hours as defined below:

	<b>Daylight period – GMT</b>	
	South of 57 30'N	North of 57 30'N
26-31 January	0747 - 1635	0815 - 1545
1-10 February	0729 - 1658	0749 - 1636
11-20 February	0708 - 1720	0723 -1705

For each degree of longitude west, four minutes will be added to the time; for each degree of longitude east, four minutes will be subtracted.

The survey area is outlined in the attached chart but the exact fishing position will be decided in collaboration with the fishing master. The Scanmar system will be used throughout the survey to monitor headline height, wing spread, door spread and distance covered during each haul. A bottom contact sensor (BCS) will be attached to the ground-gear and the data collected will be downloaded after each haul.

Catches will be processed according to standing sampling protocols with additional biological data collected for species as determined.

### **Methot Net Sampling**

Pre-metamorphosis herring larvae will be sampled during the hours of darkness with the Methot mid-water trawl (Round frame). Two double oblique tows will be made in every square within the assigned survey area. The vertical profile of the tow will be monitored using the Scanmar system.

### **Hydrography**

Surface and bottom temperatures, salinities, nitrates, silicates and phosphates will be taken at all trawl stations. The ships thermosalinograph will be run continuously throughout the survey.

### **General**

Bird and cetacean observations will be undertaken by JNCC staff whilst the vessel is steaming between trawl stations (weather permitting).

Information gathered by the participating vessels will be exchanged by fax.

Normal contacts will be maintained with the Laboratory.

Submitted:  
F Burns  
7 January 2014

Approved:  
I Gibb  
9 January 2014

0214S - Scotia IBTS – N Sea Quarter 1 Survey – Survey area

