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## **MRV Scotia**

### **Survey 1616S**

#### **PROGRAMME**

5-14 November 2016

Loading: Aberdeen, 3 November 2016

Departure: Aberdeen, 5 November 2016

Unloading: Aberdeen, 14 November 2016

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**

R J Kynoch                      SIC  
F Burns  
J Hunter  
D Eerkes-Medrano

**Estimated days by project:** 10 days – SU02ND (20154)

#### **Fishing Gear**

PT160 pelagic trawl

BT237 new Jackson high standing demersal trawl fully rigged with 350mm rockhopper ground gear and 200mm floats

1 Set Thyboron 'flapper' trawl doors

1 set GOV polyvalent trawl doors

#### **Objectives**

1. To establish a fishing protocol to fish the PT160 trawl close to the surface and in mid-water using the Thyboron 'flapper' trawl doors.
2. To configure the same doors to demersal fish the BT237 trawl.
3. As Objective 2 but to fish with the polyvalent trawl doors, used with the GOV (BT137), as a comparison.

4. To obtain underwater observations using mini TV system, gear geometry and drag data for both trawls.

## **Procedures**

The fishing gear will be loaded aboard and rigged prior to the start of the survey. The PT160 trawl will be rigged on the top net drum and the BT237 trawl rigged on the lower net drum. The 'flapper' doors will be used first and the polyvalent doors stored on the upper castles. It should be noted the trawl doors will need to be switched over towards the end of the survey.

The main objective is to identify the optimal configuration for the new 'flapper' doors to fish both pelagic and demersal survey trawls during the annual herring survey.

Post departure from Aberdeen and after all safety drills have been completed, the vessel will sail to the Moray Firth. Trials will start with the pelagic gear and aim to establish the correct rigging configuration to ensure the 'flapper' doors operate optimally (near surface and pelagic) with the PT160 trawl. Once Objective 1 has been completed the same process will be undertaken to demersal fish the BT237 trawl (Objective 2). During the survey underwater observation will be made using a mini (self-recording) TV system to assess netting shape and opening. Gear geometry and load cell data will be collected to measure gear performance. After completion of trials with the 'flapper' doors and as a comparison (with GOV trawl - BT137) the BT237 trawl will be fished with the 1100kg polyvalent trawl doors (Objective 4).

Flexibility will be required as calm sea conditions are required for underwater observations and gear geometry measurement. Survey schedule and operations will be decided by SIC after daily consultation with Fishing Master and Captain.

The survey will finish in Aberdeen on 14 November with all staff and equipment/fishing gear (except polyvalent trawl doors) returning to the Marine Laboratory.

Normal contacts will be maintained with MSS.

Submitted:  
R J Kynoch  
8 September 2016

Approved:  
I Gibb  
8 September 2016