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MRV Scotia

Survey 1112S

### **PROGRAMME**

6-14 September 2012\*

#### **Ports**

**Loading:** Aberdeen, 3 September 2012 **Unloading:** Ullapool, 15 September 2012\*

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 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

J Drewery (SIC)

R Kynoch

F Burns

F Neat

M Gault

R Cairns

M Stewart

N Collie

N Scully (Visitor - Marine Institute, Ireland)

V Khlivnoy (Visitor – PINRO, Russia)

Estimated Days per Project: 9 days – SU02ND, Rockall Haddock Survey

Fishing Gear: GOV Trawl (BT 137) with ground gear D

# **Other Gear**

CTD - Seabird 19+

VMUX towed TV chariot + cable Reson Multibeam echosounder

<sup>\*</sup> Ullapool date TBC during 1111S

### **Objectives**

- To undertake the bottom trawl survey of haddock on the Rockall Plateau to depths of 350 m.
- To deploy a CTD at each trawl station to collect temperature and salinity profiles.
- To collect samples (genetics and otoliths) for key species for population studies, contaminant studies and other requests, e.g. MSFD litter recording.
- To map seabed habitats and coral reefs using towed VMUX chariot video system and/or the swathe multibeam echosounder.

#### **Procedures**

The primary objective of this part of the survey is to assess the state of the haddock stock on the Rockall Plateau. Although the Rockall haddock survey has existed for a number of years, since 2011 a new semi random stratified survey design is now utilised comprising four sampling strata separated according to depth (see Figure 1). The overall survey coverage reflects that of the previous fixed station design, however, the sampling intensity for each stratum reflects the fish density in each stratum. Trawling will be carried out during the hours of daylight at randomly selected locations within the 350 metre contour. Forty tow positions have been generated and their allocation within each depth stratum is displayed in Figure 1. The number of stations within each depth strata is as follows: 2 stations at 0-140m, 12 stations at 140-200m, 11 stations at 200-250m and 15 stations at 250-350m. One haul of 30 minutes duration will be made at each sampling station. Daily start times for survey stations will be at approximately 06:00 hrs and continue until approximately 20:00 hrs. The Scanmar system will be used to monitor wing spread, door spread and distance covered during each haul. A bottom contact sensor will be mounted on the footrope to record the distance of the trawl off the seabed. Catches will be worked up according to the protocols for International Bottom Trawl Surveys and in line with MSS Standing Instructions. A CTD will be deployed at each trawl station.

At night the VMUX towed video chariot will be deployed in and outside areas closed for the protection of coldwater coral reefs and in areas of interest identified within the 12 mile limit of the islet of Rockall. In the case of weather conditions curtailing deployment of the VMUX, the swathe MBES will be considered as an option for opportunistic mapping of the seabed building on previous swathe mapping of the area. Upon completion of the Rockall haddock survey, passage will be made to Ullapool for half-landing on or around 15 September. The GOV net and associated gear will be stripped down and offloaded together with TV kit at Ullapool in exchange for the deepwater trawl gear.

Normal contacts will be maintained with the Laboratory.

Submitted: J Drewery 16 August 2012

Approved: I Gibb 17 August 2012

**Figure 1:** Survey map with stations of Rockall Bank - 1112S. Sampled strata are those ranging from 0-350m depth. Red boxes represent restricted / closed areas.

