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MRV *Alba na Mara*

Survey 2016A

PROGRAMME

2 - 13 November 2016

Ports

Loading: Fraserburgh, 31 October 2016
Departure: Fraserburgh, 02 November 2016
Unloading: Fraserburgh, 13 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

J Drewery (SIC)
S Rosen (Institute of Marine Research, Bergen) 2nd to approx. 8th November
AN Other (TBA)

Estimated days by project: 12 days, 20178

Gear

Prawn trawl BT 201
Deep Vision Camera and lights (supplied by IMRB)
Net mounted camera system
Turbidity meter
Scanmar instrumentation
600mm Square Mesh Panel (SMP)

Objectives

- Primary: To obtain Deep Vision footage from a demersal trawl on different ground types and turbidities: typical nephrops grounds (mud), clearer demersal grounds (sand, gravel) and turbidities and compare data from recorded footage with actual catches in each instance.
- Secondary (Time permitting after completion of primary objective): To undertake catch comparison trials using a 600mm Square Mesh Panel (SMP) rigged at 12-15m from the cod line of the BT201.

Procedure

Deep Vision is a camera system developed at IMR Bergen, which will film fish passing down the taper of BT201 allowing species identification and measurement to be made. It is rigged into a 4-panel section at the end of the taper of BT201. A small mesh collection codend is fitted behind the camera section.

The Deep Vision gear, mini TV equipment and scanmar instrumentation will be rigged aboard the vessel prior to sailing on 02 November. The intention will be to make for suitable grounds with good visibility in the Moray Firth close to Fraserburgh to test the Deep Vision systems while using cameras to observe the rigging and fish behavior near the system.

Part 1: Deep Vision system. The preferred area of operation for obtaining clear water along with reasonable gadoid catches will be the Orkneys, while the Moray Firth will provide nephrops grounds and potentially a range of turbidities. Which area is worked first will depend on the prevailing weather conditions and decisions will be made following detailed discussions with the skipper and will take into account the working practices of the vessel.

The number of hauls made each day and their duration will be variable and depend on the grounds being fished, visibility, and catch. At the end of every haul the footage from Deep Vision will be downloaded and the catch sorted into species and measured.

There will be one scheduled port call (TBA) for change of staff, this likely to be around 8th November but exact date will be in accordance with progress.

Part 2: Catch comparison with BT201 incorporating a 600mm SMP. This will take place in areas where there has been reasonable quantities of commercial gadoids identified during the part 1. The trawl will be fished with the SMP in place alternatively covered/uncovered with 80mm diamond mesh to provide a comparison in catch rates. At the end of each haul the catch will be sorted by species and measured.

General

There is no need for any night hauls during this survey and work patterns will be arranged around the normal working hours/practices of the vessel. The survey will end in Fraserburgh on 13 November with all staff, fishing gear and scientific equipment returning to the Marine Laboratory.

Normal contact will be maintained with the laboratory.

Submitted:
Jim Drewery
04 October 2016

Approved:
Fran MacKay
19 October 2016