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

MRV Alba na Mara

Survey 1919A

PROGRAMME

04 - 12 November 2019

Ports

Loading:	Fraserburgh, 30 October 2019
Sailing:	Fraserburgh, 04 November 2019
Unloading:	Fraserburgh, 12 November 2019

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 cruise ending. In the case of the Survey Summary Report a nil return is required, if appropriate

Estimated days by project: 10 days, 20175

Gear

Trawl BT201 Net mounted camera system Scanmar instrumentation Seltra box incorporating a 300mm square mesh panel

Objectives

• To undertake catch comparison trials using a Seltra sorting box rigged into the extension of the BT201. Target species will be commercial gadoids, nephrops, commercial flatfish, and anglerfish

Procedure

The Seltra sorting box consists of a four panel extension piece incorporating an escape window (in this case a 300 mm square mesh panel) into the top section. The four panel design helps to maintain good clearance between the bottom panel and the escape window. The Seltra is designed to reduce unwanted bycatch of whitefish while maintaining catches of nephrops.

The Seltra box will be provided ready rigged into a suitable extension piece with an 80mm codend attached. A count of the meshes round will be made at the joining point of this piece. This will be joined 1:1 at the appropriate point located in the taper of the BT201 with any section requiring cut away being retained for re-joining at the end of the cruise. If possible

following rigging onto the BT201 the Seltra box and extension will be laid out on the harbourside for initial measuring and photographing.

The preferred area of operation will be on mixed prawn/fish grounds in the Moray Firth. This however will be open to discussion with the skipper and exact grounds will be decided following these. Trawl area will focus on consistently obtaining a range of gadoid species (haddock, whiting cod) plus nephrops. Discussions will take into account the working practices of the vessel.

Initial operations (approx. 2 days) will focus on obtaining camera footage of the rigging of the Seltra box and of whitefish behavior at the escape window itself.

Following successful completion of the camera work MSS engineering staff will depart the vessel and operations will switch to trawl catch comparison. The trawl will be fished with the Seltra box in place where the square mesh panel is alternatively covered / uncovered with a section of 80mm diamond mesh. This will provide multiple sets of paired hauls allowing a combined comparison of catch rates over time. At the end of each haul the catch will be sorted by species and measured.

To better enable comparison, variance between hauls will be kept to a minimum. All hauls will be undertaken in full daylight, avoiding times of dusk and dawn, and as far as possible all hauls will be undertaken in the same area. Ideally two sets of two hauls will be undertaken each fishing day and projected haul duration will take both this and the amount of work associated with sorting and measuring the catch into account.

Following completion of the final haul, the BT201 will be cleaned and the Seltra extension piece removed, following which any sections previously removed to accommodate the Seltra extension will be restored.

General

There is no need for any night hauls during this cruise and work patterns will be arranged around the normal working hours/practices of the vessel. The survey will end in Fraserburgh on 11 November with all staff, fishing gear and scientific equipment returning to the Marine Laboratory on 12 November.

Normal contact will be maintained with the laboratory.

Submitted: J. Drewery, 27 October 2019

Approved: I. Gibb, 31 October 2019