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MRV Scotia

Survey 1620S

PROGRAMME

25 October – 5 November 2020

Loading: Aberdeen 22 October 2020

Departure: Aberdeen 25 October 2020

Unloading: Aberdeen 5 November 2020

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.

Estimated days by project: 12 days – SU02N0 (20154)

Fishing Gear

BT137 GOV trawl rigged with ground gear A.

BT237 (Jackson trawl) rigged with Light hopper rig (300mm and 250mm discs).

2 sets GOV polyvalent trawl doors.

Objectives

1. To assess the fishing performance, in terms of gear geometry, of the BT237 with different sweep lengths. Either 15 or 20 minute hauls will be made using Scanmar and bottom contact sensor on water depths ranging from 30 m to approximately 200 m.
2. To carry out catch comparison trials to compare the fishing performances of the BT237 trawl against the standard survey trawl BT137 (GOV) rigged with A gear.
3. To obtain underwater observations of net shape (BT237) using a self-recording mini TV system attached to different areas of the trawl.

Procedures

General

The fishing gear will be loaded aboard on 22 October with only the BT237 trawl rigged onto the lower drum with 47 m sweeps and 40 m bridles. The 68 m sweeps and 50 m bridles will be rigged onto the top drum and operated similar to the BT137 (GOV) during west coast surveys. The

polyvalent doors will be used with both trawls throughout the survey, spare set to be stored on the upper castles. *Scotia* will sail on 25 October and after all safety drills have been completed make passage for the Moray Firth where a shakedown haul will be made. Thereafter and weather permitting the intention is to work around the Shetland Islands for the duration of the survey. Trawling operations will be conducted from 0700 until 2100. After assessing the different sweep lengths the BT137 (GOV) will be rigged onto the top drum and catch comparison hauls will be made comparing BT237 v BT137 (GOV)

Fishing

The main objective of this survey is to compare the gear geometry of BT237 when using short (99.53 m) v long (130.83 m) sweepline lengths (Objective 1). Depending on the performance of the longer 22 mm sweepline a slightly heavier (24 mm) but with similar lengths maybe tested.

Depending on which sweepline performs the best catch comparison hauls (BT237 v BT137) will then be made using the alternative haul method during daylight hours (Objective 2). Catch comparison hauls will consist of 15 to 30 minute tows depending on fish species mix on the grounds. The hauls will be paired and both paired hauls in a set must run along parallel fishing tracks. The aim is to keep the pattern, timing and environmental factors (daylight/dark periods) as constant as possible between the first and second tow in each set of paired hauls.

During dark hours and up to 2100 further gear geometry or underwater observations (Objective 3) hauls will be carried out.

Survey schedule and operations will be decided by SIC after daily consultation with Captain and Fishing Master.

The survey will finish in Aberdeen on 5 November with all staff, some scientific equipment and most fishing gear returning to the Marine Laboratory. Some of the BT137 fishing gear and both sets of trawl doors will be left aboard for survey 1720S.

Normal contacts will be maintained with MSS.

Submitted:
R J Kynoch
01 October 2020

Approved:
I Gibb
19 October 2020