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MRV *Alba na Mara*

Survey 1614A

PROGRAMME

13-24 September 2014

Ports

Loading: Fraserburgh, 10 September 2014

Unloading: Fraserburgh, 24 September 2014

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 Cruise Report, to I Gibb and the Cruise Summary Report (old ROSCOP form) to M Geldart, within four weeks of a cruise ending. In the case of the Cruise Summary Report a nil return is required, if appropriate.

Personnel

K Summerbell (SIC)
E Lines
M Kinghorn
J Hunter
A R Eryasar Mersin University (Visitor)

Costs to Project: 12 days - 20236

Equipment:

BT 201 prawn net – with separator panel and two 40mm codends
Trawl Doors
Sweeps, bridles, backstrops and pennants
Spare netting and twine
PSL5000 light unit
2 x 20m light fibre cables
CTD and light sensor
Video Cameras
Flashback recorders and housing
Pyramid camera frames
Scanmar units – wing, door, height and depth
Catch bins
Catch sorting table
Tank for live fish capture

Objectives

- To identify potential effects to fish behaviour, primarily haddock, with the use of lights attached to the mouth of the trawl.
- To capture live haddocks ~30cm in length for fish behaviour work back at MSS Aberdeen.

Procedure

Alba na Mara will leave Fraserburgh on 13 September and steam to a nearby fishing ground. A number of short hauls will be carried out to ensure the separator panel in the trawl is rigged correctly through observations with video cameras. Minor adjustments will be carried out on-board; however, larger scale alterations may require laying out on a quayside. Once the test rigging trials are complete the vessel will steam towards fishing grounds east of Copinsay Island, where the catch comparison fishing trials will be carried out. *Alba na Mara* will return to Fraserburgh on 23 September with scientific personnel and equipment unloaded on 24 September.

Fishing

Fishing operations will be carried out twice daily using the BT201 prawn net. The trawl is fitted with a horizontal separator panel that leads to two separate 40 mm codends. Hauls will initially be four hours long with the potential to be shortened if catches are too large, and towed at three knots. Scanmar units will be used to monitor wing spread, door spread, and headline height during each haul. The two daily tows will consist of a single tow with the lights on and a single tow with the lights off (light unit will not be attached), the order of lights on/off will be alternated daily. The PSL5000 light unit and light fibre cannot be wound onto the net drum. It will be attached to/detached from the leading edge of the separator panel during shooting/hauling. To ensure staff safety the trawl will be secured prior to attaching/detaching the lights.

Half-height bins will be used on deck for receiving and storing the catch from the separate codends. The catch will be sorted into key species, weighed and individual total length measurements recorded.

A CTD with an additional light meter will be slowly lowered to within 5 m of the seabed and then slowly retrieved before and after each haul. This will measure the background light levels which could influence the catches.

Any marine litter brought onboard during trawling operations will be documented and photographed before being placed into "KIMO Fishing for Litter" bags. At the end of the survey the bags will be deposited safely on the quayside to be collected for disposal.

Live Fish Capture

If time permits at the end of the survey, short dedicated tows will be carried out for the capture of live haddock for use in fish behaviour work back at the MSS lab, Aberdeen. The tows will last <30 minutes and the net will be hauled back slowly and the catch sorted on-board with healthy haddock in good condition ~30 cm being placed into the tank of seawater pre-prepared for this purpose. Numbers will depend on the success rate of capture on-board.

Normal contacts will be maintained with the laboratory.

Submitted:
K Summerbell
20 August 2014

Approved:
I Gibb
04 September 2014.