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MRV *Scotia*

Survey 1612S

REPORT

13 November – 4 December 2012

Personnel

C G Davis	SIC
L Ritchie	
R Cairns	
F N Burns	(Part 1)
K Summerbell	(Part 1)
J Dunn	(Part 1)
M Geldart	(Part 1)
L Morley	(Part 1)
A Edridge	(Part 1)
R Gillespie-Mules	(Part 1)
D Downie	(Part 2)
J Dooley	(Part 2)
M Kinghorn	(Part 2)
W Smith	(SFF – Part 2)
G Scott	(SFF – Part 2)

Out-turn days per project: 22 days, RV1210

Fishing Gear

GOV trawl (BT137) with belly lines and ground gear D

Objectives

1. To participate in the ICES co-ordinated Western Division Demersal Trawling Survey.
2. To obtain temperature and salinity data at each trawling position.
3. To collect additional biological data in accordance with the EU Data Directive 1639/2001 and 1581/2004.
4. To collect pollution samples for SEPA & MSS.
5. To collect data on marine litter.
6. To collect cod samples for Prof P Hart (University of Leicester).
7. To deploy hydrographic equipment and mooring buoy at Stonehaven sampling site.
8. To train SFF personnel in species ID and 'discard' sampling techniques.
9. To ascertain Mackerel year class (recruitment) strength to the west of Ireland.

Narrative

This survey was conducted using a random-stratified design with trawl locations being distributed within ten predefined sampling strata (see Figure 1). The intention is for trawls to be undertaken on suitable ground as near to the specified sampling position as is practicable and where possible within a radius of five nautical miles of that position. If no suitable ground can be located within five nautical miles then the nearest alternative trawl station should be used. Hauls will be of 30 minutes duration and generally fishing operations will take place during the hours of daylight where possible.

On this survey, *Scotia* sailed from Aberdeen at 0900 on Tuesday 13 November and proceeded south to deploy hydrographic equipment and associated marker buoy in Stonehaven bay. This was carried out successfully and with no difficulties, after which J Dunn and M Geldart were put ashore in Stonehaven by ships rescue craft.

On leaving Stonehaven bay *Scotia* made a northerly course for the first trawl station to the west of Orkney. Whilst en-route, the opportunity was taken to deploy and check the operation of the trawl gear; in particular to measure the gear dimensions under strain.

Fishing commenced the next day at 0700, at a position to the west of Orkney. The short term weather forecast was reasonable for this time of year and advantage of this was taken to progress westward for the next three days.

Scotia had to make arrangements for a member of scientific staff to be put ashore in Ullapool to seek medical attention. This saw *Scotia* working in the North Minch on Friday 16 November before docking in Ullapool at 1300. During the port call an Echomaster engineer was called to effect repairs to a motion compensated balance.

Scotia departed Ullapool at 1730 and progressed towards stations to the north of Lewis. Careful monitoring of forecasts suggested that we were to encounter uncomfortable weather conditions in the days to come but nothing that should prevent us from continuing our operations.

Scotia continued to work west and then southwards down the shelf edge, in rough weather conditions to the west of the Stanton Banks. Overnight passage was then made to Barra to disembark one of the ships crew on the morning of Thursday 22 November.

Scotia worked in a northerly direction though the South Minch and then made passage for Ullapool for the scheduled half landing.

Scotia docked in Ullapool at 2215 on Thursday 22 November. During the half landing the repaired basket weighing balance was returned to the vessel. A staff exchange was undertaken whilst in port.

Scotia departed from Ullapool at 0700 on the morning of 24 November, heading south to a station located to the east of Harris.

Scotia continued operations south through the Stanton banks area and then south westwards down the west coast of Ireland. Surveying continued along the north coast of Ireland and then into the Clyde sea area on 30 November. Designated core stations of the survey design were completed on 30 November. *Scotia* undertook seven additional survey stations up the shelf edge to the west of the Hebrides, finding us positioned at 'Clash Deeps' on the morning of 3 December, where scientific operations were terminated.

Scotia made passage for Aberdeen where she docked at 0100 on 4 December.

All staff disembarked and scientific equipment was unloaded on the morning of 4 December.

Results

Trawling

Scotia encountered generally moderate weather conditions during this survey. This resulted in the survey achieving a total of 69 trawl hauls with the GOV – D gear. Of this total, three were assigned as foul hauls due to the level of gear damage sustained and six were additional stations in excess of the designed core stations.

The Scanmar gear monitoring system and the NOAA bottom contact sensor were used throughout the survey to observe the gear performance.

The trawl positions are shown on the attached chart below

Length, weight, sex and maturity were collected from all species listed in the EU Data Collection Regulation (EC) No 1639/2001.

Hydrography

The thermosalinograph was run continuously throughout the survey. The CTD was deployed at each station to obtain temperature and salinity profiles.

Biological sampling

Biological data was recorded for a number of species in accordance with the requirements of the EU Data Regulations.

A number of additional biological samples were collected for MSS and various other bodies as detailed in survey objectives.

C G Davis
7 January 2013

2012 Q4 W.Coast IBTS Trawl Station Locations
(Stations in red are foul / invalid)

