Not to be cited without prior reference to the Marine Laboratory, Aberdeen

MRV Scotia

Survey 1015S

PROGRAMME

30 July - 20 August 2015

Ports

Loading: Aberdeen, 27 July 2015

Half landing : Aberdeen, 10 August 2015 (provisional)

Unloading: Aberdeen, 20 August 2015

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

F. Burns (Part 1) (SIC – Part 1) R. G-Mules (SIC – Part 2)

J. Dooley (Deck – Part 1)

I. B-Cerezo

H. Holah

N. Ensor (Part 1)
G. Packer (Part 1)
R. Kilburn (Part 1)

M. Kinghorn (Part 2) (Deck)

J. Mills (Part 2) J. Rasmussen (Part 2)

M. Bao (Visitor – Aberdeen Uni - Part 1)
J. Monhart (Visitor – Aberdeen Uni - Part 2)
A. Kent (Visitor – Napier Uni - Part 2)

Estimated days by project: 22 days - RV1511

Fishing Gear

GOV Trawl (BT 137) with ground gear A & B

Objective

- 1. To complete an internationally coordinated demersal trawling survey in the North Sea in ICES area IV.
- 2. To obtain temperature and salinity data from the surface and seabed at each trawling station using a SEABIRD 19+ CTD.
- 3. Collect additional biological data in connection with the EU Data Collection Framework (DCF).

Procedures

General

Loading of the trawl gear will provisionally take place on 27 July with rigging and testing being completed on the same day. Loading of the scientific gear will also take place on the same day. *Scotia* will then sail on the morning of Thursday 30 July. The first station will be Northeast of Peterhead at Buchan Deeps and once the safety drills have been completed Scotia will then proceed to the first station where a shakedown haul will be completed in advance of the first real haul in order to check the net configuration and also the Scanmar units. An operational daily survey plan will be formulated by the SIC subsequent to meetings with both the Fishing master and the Captain. It is the intention that these meetings take place where possible during times that are mutually convenient.

Trawling

There are 84 programmed rectangles to be surveyed and these are presented on the attached chart. Depending on the progress of the other survey participants 10 of these rectangles (51E9, 49E9, 47E9, 46E2, 45F0, 44E9, 44F0, 44F1, 41F6 and 41F7) may be dropped depending on the progress of the other survey participants. In addition it was decided at the Bergen meeting in April 2015 that the IBTSWG would propose a tow duration experiment during the Q3 North For every rectangle within the survey area where 2 trawls are currently undertaken, one would be of 30 minutes duration whilst the other would be of 15 minutes duration. This will allow a dual set of abundance indices to be calculated for the assessed species which will evaluated in time for IBTSWG 2016. As a parameter of diversity, species richness will also be compared. See attached chart for the configuration of stations and their subsequent tow duration. The reduction of stations as well as the tow duration experiment should allow additional stations to be sampled in the area to the south and west of Shetland. Contact will be maintained with the other survey participants prior to and during the survey and a decision will be made regarding these additional stations once the survey is underway. Trawling will be undertaken during the hours of daylight which will vary depending on the vessels latitude at any given time. The GOV survey trawl will be used during the survey with the short 47m sweeps used throughout the survey area. Two groundgear types will be utilised during the survey, the lighter A rig being used on all the survey stations south of 57'30N and the heavier B rig being utilised on all the stations north of 57'30N. The scanmar system will be used to monitor the headline height, wing spread and door spread for each haul. Bottom contact data from each trawl will also be collected using the NOAA bottom contact sensor which will be

mounted in the centre of the ground-gear. In addition to the routine sampling, biological data will be collected for target species in line with the EU data regulation. All fish will be processed in accordance with Standing Instructions.

Hydrography

CTD casts will be taken at every trawl station. These provide surface and bottom temperature and salinity information. Reverser bottles affixed to the CTD wire will also be used to collect water samples that will be analysed back at the lab and will provide information on salinities, nitrates, silicates and phosphates. In addition the ships thermosalinograph will be run continuously throughout the survey and will provide sea surface temperature and salinity data.

Normal contacts will be maintained with the Laboratory.

Submitted: *F. Burns* 25 June 2015

Approved: I. Gibb 17 July 2015.

1015S Quarter 3 Groundfish Survey

- 30 July 20 August 2015 + MSS Trawl station rectangles (30mins)
- MSS stations where trawl duration is 15mins
- + Rectangles where additional stations may be undertaken
- O Potential stations that may be dropped

