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

MRV Scotia

Survey 0616S

## PROGRAMME

8-29 May 2016

Ports

Loading: Aberdeen, 4 May 2016 Half Landing: Galway/Cork (TBC) Unloading: Aberdeen, 29 May 2016

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

J Drewery (SIC) F Burns L Ritchie J Mills M O'Malley S O'Connell N Richardson (Visitor, University College Cork)

# Out-turn days to project: 22 days - RV1605 (20380)

# Fishing/Sampling Gear

GOV (BT137) with Groundgear 'D', Pelagic Trawl (PT160) Gulf VII plankton sampler

# Objectives

- 1. To carry out mackerel egg survey (ICES Triennial Survey), on the western shelf and shelf edge in the area from 51°N to 58.5° N (see Figure 1).
- 2. To collect fish samples, by trawling, for atresia and fecundity analysis back at the laboratory.

## Procedures

After departing port and undertaking all relevant drills the vessel will proceed to the first plankton station line at 58<sup>°</sup> 15'N 7°15W. Subsequent stations will be taken along the same line west at 30' intervals. Transects will be at 1°N intervals with stations at 30' E/W intervals. Plankton stations will be taken using the Gulf VII sampler with mounted CTD which will record salinity and temperature during each tow.

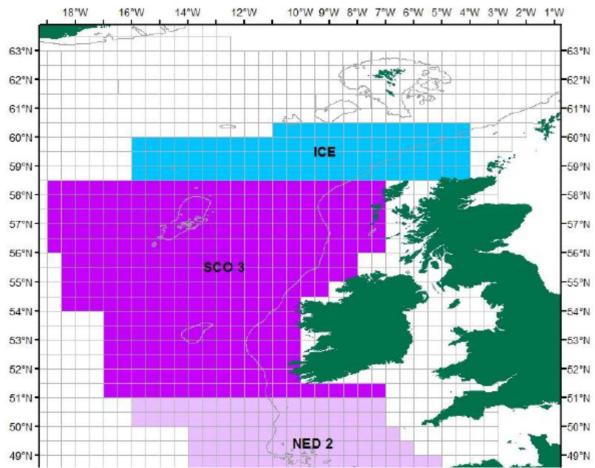
The plankton tows will require the vessel to deploy then proceed to tow the sampler at five knots. The sampler will then be lowered at a steady rate (10 m/min) from the plankton crane to within 5 m of the seabed or 200 m – whichever is shallower. The sampler will then be recovered at the same speed. Once aboard, plankton samples will be washed from the sampler net, fixed in formalin and scored for egg abundance. Trawl samples will be taken at the discretion of the scientist in charge in conjunction with the fishing master and will usually be taken at the shelf edge. The precise length of each transect cannot be defined in advance as this survey uses an adaptive design, where sampling along a line will continue until there are no or very small numbers of mackerel eggs present.

The half landing is expected to be in Ireland around 18-19 May, the exact location of which will depend on the progress of both *Scotia* and that of the other nations sampling during this period (see Figure 1) *Scotia* may be asked to extend the range further south which would see Galway or Cork as a possibility for a half landing. Following the half landing the survey will proceed back over the area covered in the first half with transects interlaced between those carried out during the first half.

Normal contact will be retained with the laboratory throughout, and with other vessels taking part in the survey.

Submitted: J Drewery 03/05/2016

Approved: I Gibb 03/05/2016



**Figure 1:** Map showing international survey coverage. 0616S denoted as 'SCO 3' on plot.