

P17/15

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

## **MFV Unity**

Cruise 0307H

## **PROGRAMME**

7 -21 May 2007

## **Ports**

**Loading:** Fraserburgh, 4 May

**Half Landing:** None

**Unloading:** Fraserburgh, 21 May

**\*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 FRS' Working Time Policy (which is published on the Intranet). 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 John Morrison and the Cruise Summary Report (old ROSCOP form) to Dougal Lichtman, within four weeks of a cruise ending. In the case of the Cruise Summary Report a nil return is required, if appropriate.**

## **Personnel**

D Reid (In Charge)

F Burns

I Gibb

E Armstrong

R Watret

**Fishing/Sampling Gear:** 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 60° N (see figure 1).
2. To collect fish samples, by trawling, for atresia and fecundity analysis

## **Procedures**

The vessel will proceed to the first plankton station line at 59° 45'N 5°15'W. Plankton stations will be taken along the line 59° 45'N at 30' intervals. Subsequent 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 the tow. The plankton tows will require the vessel to deploy the sampler at 1-2 knots, and then steam at 5 knots. The sampler will then be lowered at a steady rate (10m/min) from the plankton

crane to within 5m of the seabed or 200m – 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. There should be a maximum of 20 trawls for the whole survey, 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 eggs.

The survey will be carried out in collaboration with the Norwegian RV G.O.Sars. The survey on Unity is intended to cover the bulk of the trawl sampling in the combined survey area and to occupy as many transects as feasible. It is not intended that Unity alone will complete the egg sampling over the whole area.

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

J A Morrison  
1 May 2007

**Figure1:** Map showing international survey coverage. 0705S denoted as 'SCO 1' on plot.

