# P17/15

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

FRV Scotia

Cruise 0408S

## PROGRAMME

15-30 April 2008

Ports

Loading: Aberdeen, 14 April Unloading: Aberdeen, 30 April

\*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

K A Coull (In Charge) I Gibb N Collie M Stewart L Allan J Mair R Catarino L Scala (Aberdeen University) J Yuan (St. Andrews University) P Lovie (SFF representative)

# **Fishing Gear**

Anglerfish Trawl BT 195 x 2; Morgere Ovalfoil OF12 trawl doors.

# Other gear

TV sled; holding tanks for live fish storage; cod end covers for live fish capture.

### Objectives

1. To undertake a nationally co-ordinated demersal trawling survey of anglerfish on the Rockall Plateau.

- 2. To undertake counts of anglerfish and determine coral density using the Seatronics TV chariot.
- 3. To tag anglerfish with data storage tags and return them to the sea.
- 4. To obtain temperature and salinity profiles at each trawling station.

# Procedures

This is a nationally co-ordinated trawl survey to estimate the abundance and distribution of anglerfish. The survey follows a set of protocols drawn up by an industry science survey planning group made up of FRS scientists and fishing representatives. These protocols share much in common with the sampling regimes described in FRS' standing instructions for demersal trawl surveys.

The cruise track and sampling locations will be delivered to the skipper prior to departure. An approximate map of the sampling area giving the locations of all of the co-ordinated surveys is appended as Figure 1. Trawling in Irish waters will take place as necessary.

# Trawling

One haul of 60 minutes duration will be made at each sampling station; trawling operations will occur in waters up to a maximum of 1000 m. Daily start times for survey stations will be at approximately 0700 and continue until approximately 2000. The Scanmar system will be used to monitor wing spread, door spread and distance covered during each haul. A bottom contact sensor will be mounted on the footrope to record the distance of the trawl off the seabed.

Catches will be worked up according to the protocols for the FRS anglerfish surveys which are similar in principle to FRS standing instructions. In consultation with the Captain and Fishing Master, additional short trawls on recognised stations may be carried out during the period 2000 at night and 0700 in the morning in order to obtain live specimens of anglerfish for tagging purposes. Data storage tags will be inserted into some anglerfish and then these will be carefully returned to their environment. Specific instructions and licenses for the tagging operations are available from I Gibb on request.

# TV operation

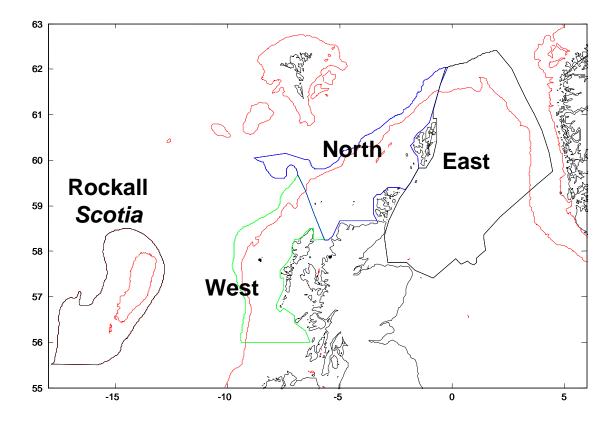
The new Seatronics TV chariot will be deployed to check for the presence of coral on trawl sampling sites where coral may be present (as defined by WGDEC potential closed areas). In the event that coral are present, trawling sites will be moved by approximately one nautical mile and the ground will be inspected again. Outside of these times, and in due consideration of staff working hours, the TV sled will be deployed between the hours of 2000 and 0700 each night, weather permitting, at sites where coral and or hard ground occurs and at sites were trawl samples will be or have been taken. The objective in these deployments will be to count anglerfish and to determine coral density. In these cases, the chariot will sample for a time as required by the operators. The vessel must be at the location of the next new trawl station at 0600 the following morning.

# Hydrography & Acoustics

A CTD will be deployed on the trawl at each station. The ships thermosalinograph will be operated throughout the cruise. The ships EK60 scientific echosounder will be operated throughout the cruise to investigate the relationship between ground type and anglerfish distribution.

Normal contacts will be maintained with the Laboratory. The other vessels on the survey will be contacted each day at approximately 1800 by medium frequency radio.

J A Morrison 1 April 2008



**Figure 1:** Map of the Northern Shelf of the North East Atlantic with the areas to be surveyed by the four vessels (in italics) in the forthcoming anglerfish survey. (The red lines indicate the approximate position of the 200 m depth contour).