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MFV Marigold

Cruise 0706C

## **REPORT**

2 November -12 November 2006

### **Ports**

**Loading:** Peterhead, 2 November

**Unloading:** Peterhead, 12 November

### **Personnel**

- |   |            |                    |
|---|------------|--------------------|
| 1 | I Penny    | (In Charge)        |
| 2 | K Peach    |                    |
| 3 | O Bjelland | IMR representative |

**Fishing Gear:** Anglerfish Trawl BT 195; Vessels own Type Nets 5.5m<sup>2</sup> 1600 kgs trawl doors.

### **Other gear:**

### **Objectives**

1. To undertake a nationally co-ordinated demersal trawling survey of anglerfish in the North Sea (Eastern survey area).
2. To obtain temperature data at each trawling station.
3. To obtain net parameter and bottom contact data for each trawling station.

### **Procedures**

This is a new trawl survey which 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 Norwegian waters will take place for approximately 7 stations.

### **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 500 m. Daily start times will be at approximately 0500 and continue until approximately 2100. The Scanmar system will be used to monitor

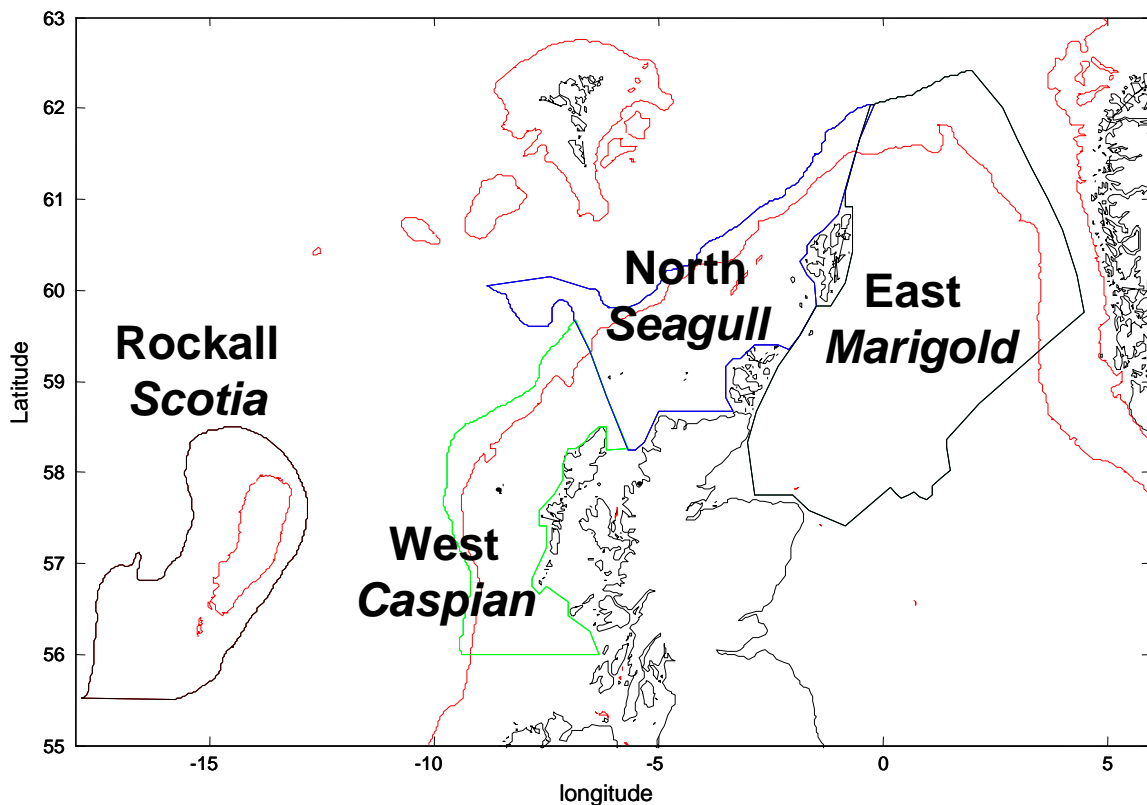
wing spread, door spread and distance covered during each haul. A bottom contact sensor will be mounted on the footrope.

Catches will be worked up according to the protocols for the FRS anglerfish surveys, which are similar in principle to FRS standing instructions.

### Hydrography

A minilog temperature/depth recording unit will be deployed on the trawl at each station.

Normal contacts will be maintained with the Laboratory.



**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).

### Report

Marigold departed from Peterhead at 1500 on Thursday the 2 November, approximately 3 hours behind schedule. The decision was taken after consultation with the skipper of the vessel to start the survey sampling in reverse order providing the vessel with a shelter for the first few days of the survey as poor weather was expected. This worked well with the Marigold able to continue working until the morning of the 5 November when a strong westerly gale terminated work and the vessel dodged for 7 hours on the eastern coast of Balta. During this time repairs were conducted to the vessel's hydraulic system.

The Marigold proceeded to the next station with a strong westerly following gale during the evening of 5 November to ensure arrival when the weather broke.

Fishing operations continued unhindered until the early hours of 9 November when a North Westerly gale forced the vessel to reduce speed and dodge to the following station where the net was badly damaged. After effecting repairs to the gear an alternative tow was selected close by and the station completed.

After discussion with the project leader the decision was made to abort the final two survey stations within the North Sea area and proceed to the north west of Orkney to assist with the northern component of the survey.

Marigold arrived east of Papa bank during the morning of 10 November in a freshening gale. Three stations were conducted before the end of the day, east, southeast and west of Papa bank, before the decision to make for shelter behind Orkney was taken - due to the increasingly violent westerly and North-westerly gales. The following day was spent dodging slowly back towards Peterhead. With weather conditions not improving the survey was abandoned and the Marigold docked in Peterhead at 2030 on 11 November.

Laboratory transport and Strachen Trawls arrived at 1000 on 12 November and off loaded the equipment and fishing gear. Laboratory staff arrived back at the Marine Laboratory at 1300.

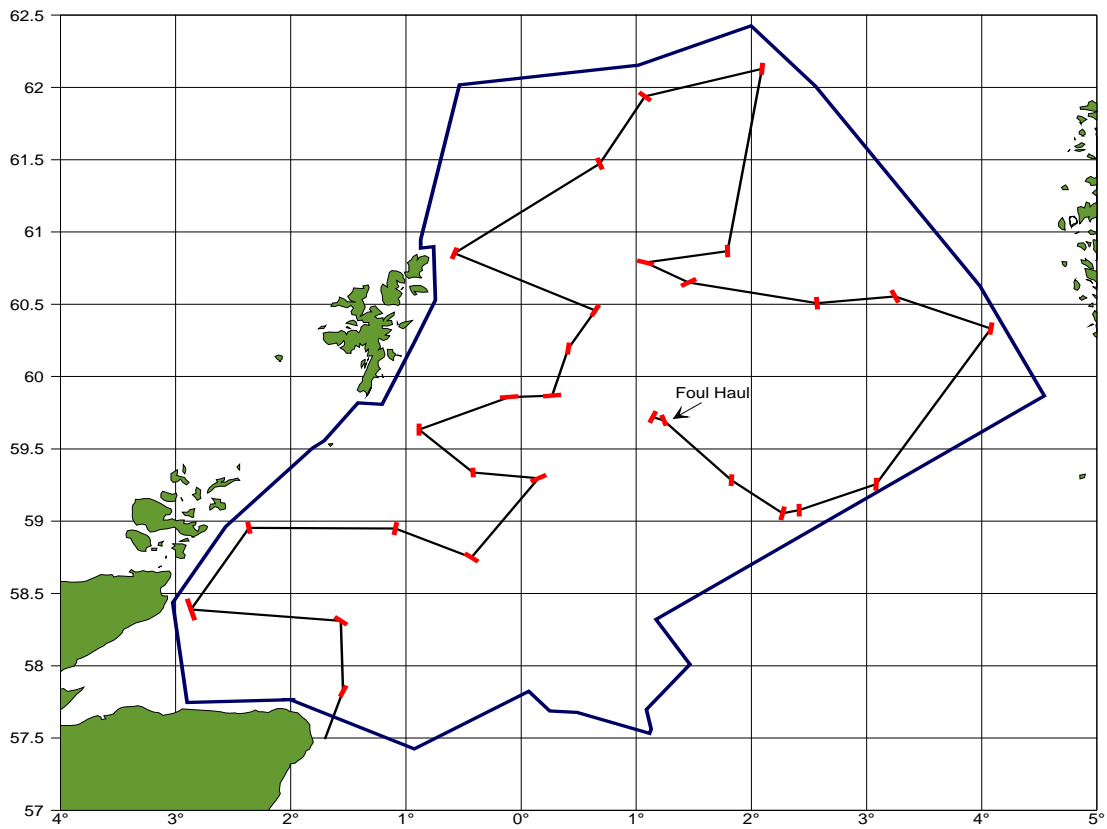
## **Results**

During the Eastern survey area the Marigold completed 29 hauls of which 28 were valid. Sampling some 281 individual Monkfish for a total live weight of 590 kgs and 269 Megrin for a live weight of 95 kgs from within the Eastern survey area. A further 3 hauls consisting of 54 individual Monkfish for a live weight of 76 kgs and 31 Megrin for a live weight of 11 kgs were sampled from the Northern Survey area.

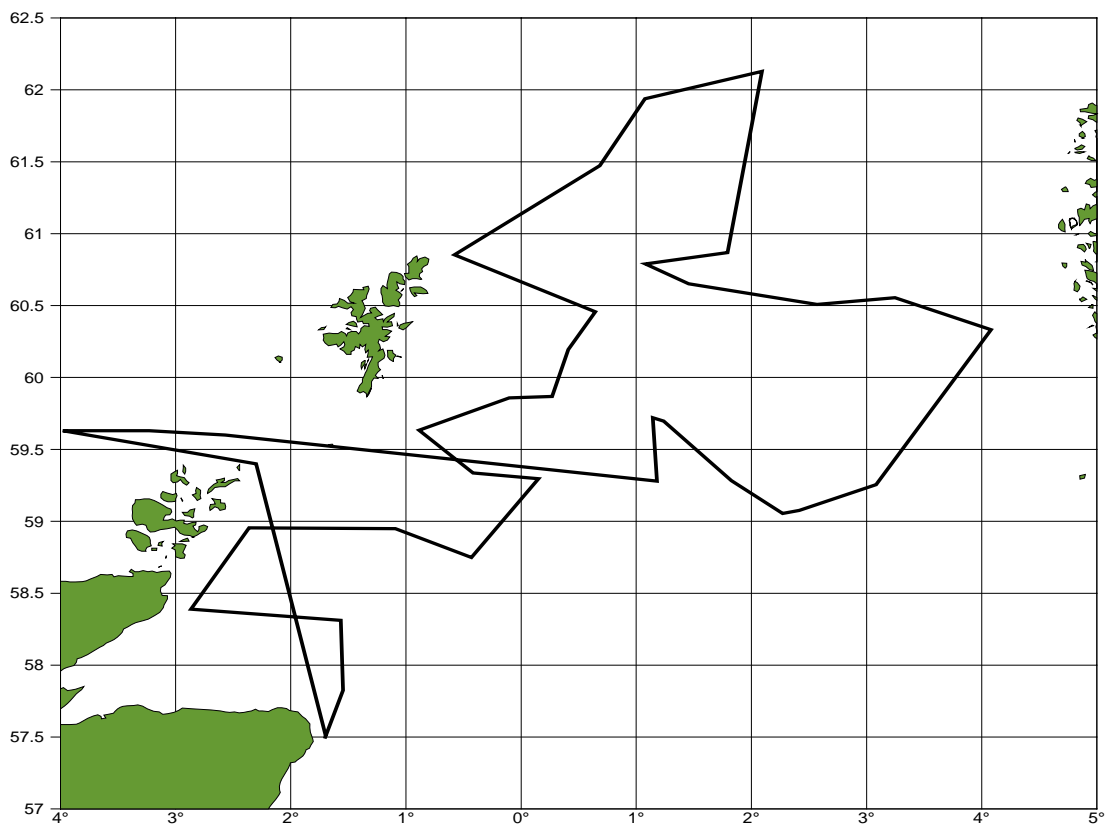
The survey area has been mapped in Figures 2, 3 and 4 showing Eastern survey cruise track and trawl sites, the complete cruise track and Monkfish distribution per hour respectively.

Iain Penny  
20 February 2007

**Figure 2 Eastern Survey Cruise Track showing Trawl Tracks**



**Figure 3 Complete Cruise Track including Northern Survey Area Trawl Sites**



**Figure 3 Numbers of Monkfish per Hour with Temperature contours taken from Trawl Sites**

