

R1/3

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

Charter Vessel *Quantus* PD 379

Cruise 1309H

## **REPORT**

29 June - 18 July 2009

### **Ports**

**Loading:** Peterhead, 23 June

**Departure:** Peterhead, 29 June

**Half-Landing:** Ullapool, 10 July

**Unloading:** Peterhead, 18 July

### **Personnel**

\*E Armstrong (SIC)

C Davis

M Stewart

M Harding

M Hay

**Project:** RV0907 – 20 days

### **Fishing Gear**

Midwater Trawl PT160 x 3

4.8 m doors

3 m doors

### **Objectives**

1. To conduct an acoustic survey to estimate the abundance and distribution of herring in the north western North Sea and West of Scotland (ICES area VIa(N) as part of the ICES International North Sea Herring Acoustic Survey.
2. To obtain samples of herring for biological analysis, including age, length, weight, sex, maturity and ichthyophonous infection.

### **Results**

All gear was transported to Peterhead by lorry and furniture van on 23 June and gear loaded onto the vessel. Installation and testing of the trawl and acoustic gear took place on the same day. Scientific staff travelled by mini-bus to Peterhead to join the vessel on 28 June and the vessel departed 0030hrs Monday 29 June. The vessel made passage to Loch Eribol where all three frequencies of the EK60 sounder were calibrated, finishing at 2000hrs. A trial trawl was

performed to familiarize the crew with the deployment of the gear, then the vessel steamed to the start of the first transect at 0300hrs Tuesday 30 June. The vessel then proceeded south through the Minch following the cruise track shown in Figure1. Acoustic data was gathered at 38, 120 and 200kHz from times between 0300hrs and 2300hrs each day to provide a stock assessment, and covered a total distance of 2550 Nm. The survey was timed to allow the southern part of the area to be interlaced with the Irish survey, which started in the northern part of their area on the 4 July. Fish shoals seen on the echosounder were identified using a pelagic trawl. Samples of all species caught were measured for length and weight to establish a length weight relationship. Otoliths were collected from a sub-sample of the herring for later analysis to determine age. Maturity state was recorded and herring were examined for the presence of *Icthyophonus* infection.

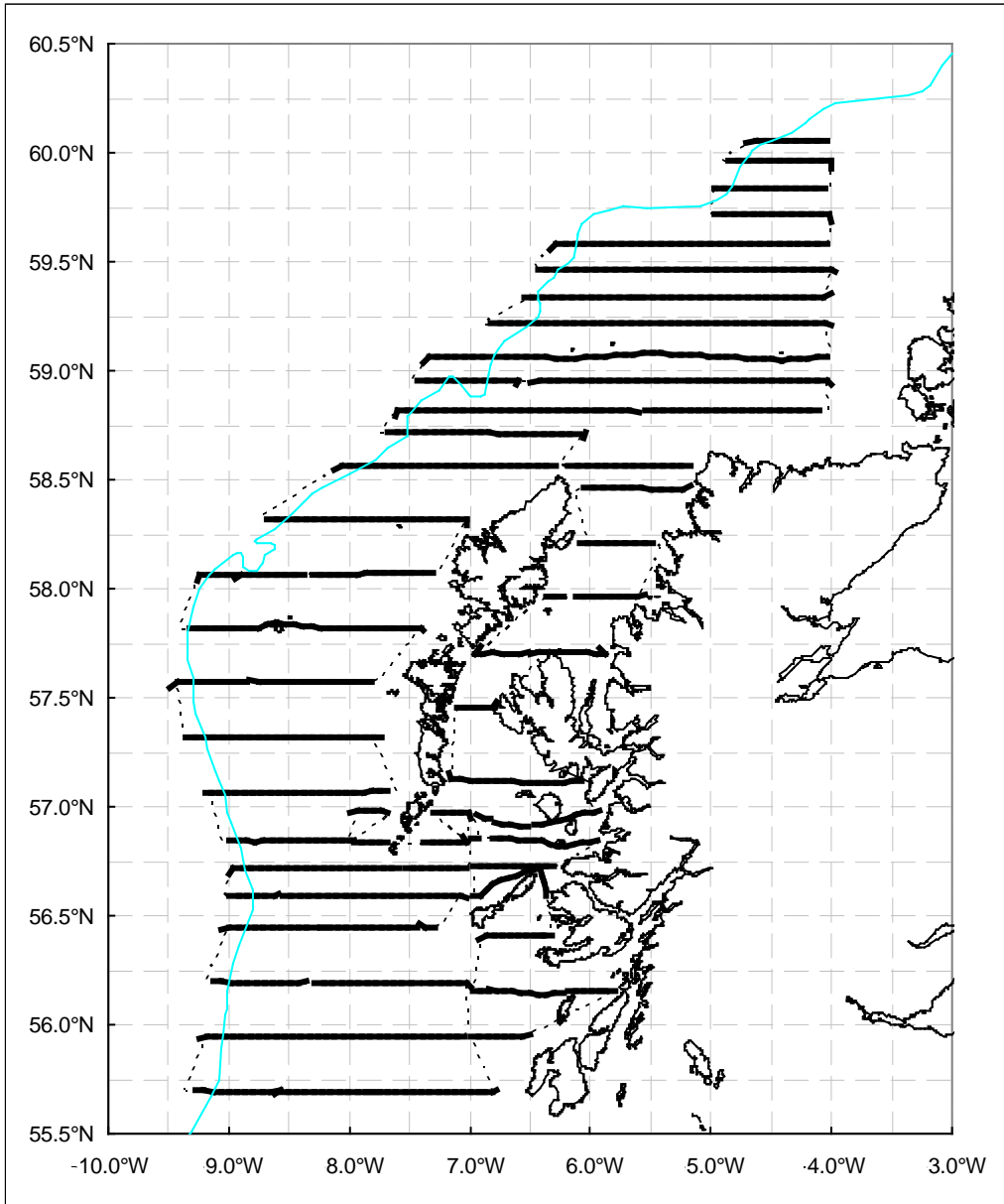
On the morning of 10 July passage was made to Ullapool, arriving at 1430hrs, to allow for a change of crew, the replenishment of supplies and to provide a rest day in compliance with WTD requirements.

The vessel departed at 1500hrs on the 11 July where a second calibration of the acoustic equipment was performed in Loch Broom This was completed at 2100hrs, at which point the vessel sailed to the Butt of Lewis to complete the northern part of the survey area. The survey was completed in the north-eastern part of the survey area coinciding with the acoustic survey by FRV *Scotia* in the adjacent area (ICES division IVa) finishing at 1300hrs on 17 July and returning to Peterhead on the morning of 18 July for unloading.

All gear was unloaded in Peterhead on 18 July and returned to the laboratory by lorry and furniture van. Staff returned on the same day by minibus.

Submitted:  
*E Armstrong*  
4 December 2009

Approved:  
*I Gibb*  
19 February 2010



**Figure 1.** Cruise track of *MFV Quantus* during the 2009 West Coast Herring Acoustic Survey