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Charter Vessel *Krossfjord* BF 70

Survey 0412H

REPORT

2-23 July 2012

Ports

Loading: Fraserburgh, 29 June

Departure: Fraserburgh, 2 July

Half-Landing: Lerwick, 12 July

Unloading: Fraserburgh 23 July

Personnel

*E Armstrong (SIC)

C Davis

M Stewart (Part 1)

B Langlands (Part 2)

Out-turn days by project: RV1207 – 22 days

Objectives

1. To conduct an acoustic survey to enhance the precision of the survey carried out by MRV *Scotia* to ultimately provide an estimate of the abundance and distribution of herring in ICES area VI and 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 ichthyophonus infection.

Procedure

All gear was transported to Fraserburgh by lorry on 29 June and loaded onto the vessel. Installation and testing took place on 29 June. Scientific staff joined the vessel on the evening of 1 July and the vessel departed in the early hours of Monday 2 July.

MRV *Scotia*, which has previously only covered area IV, included the area VIa(N) north of the Butt of Lewis. The survey was carried out within an area bounded by 58° 30'N to 62°N and 08°W to 2°E. Echointegration was carried out at 38, 120 and 200 kHz. Data from the times between 2300 and 0300 were not used for stock assessment. Trawling operations were carried out immediately prior to the half landing in Lerwick. Off loading of the catch was undertaken during the in port period. 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

to determine age. The maturity state and presence of *Ichthyophonus* infection was also recorded.

A map of the survey track is given below (Figure 1). The survey was conducted mid way between MRV *Scotia* transects (dotted line). This allowed an increase in the number of transects sampled in areas of high fish density and was as close to being simultaneous with *Scotia* as possible

The survey ended on the 22 July and passage was made to Fraserburgh.

All gear and staff were unloaded in Fraserburgh on 23 July for return to the laboratory.

E Armstrong
21 February 2013

Figure 1: Survey track of MRV Scotia (solid line) and MFV *Krossfjord* (dotted line) on the Herring Acoustic Survey 2012.

