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MFV *Kings Cross*

Charter Cruise 0498H

REPORT

10-28 July 1998

Personnel

P Fernandes	Contract (in charge)
F Armstrong	HSO
K Peach	SO (from 19/07)
J Donald	ASO
I Garioch	Contract
D Tait	ASO (until 19/07)

Objectives

To carry out an acoustic survey for herring in ICES area VIa(N) as part of the ICES coordinated acoustic and mid-water trawling survey in the north western North Sea and North of Scotland. Project code M01t (18 days).

Narrative

All gear was transported to Fraserburgh by lorry and transit van on 9 July and loaded onto the vessel. Installation was complete by the morning of 10 July. Scientific staff joined the vessel in Fraserburgh on the morning of 10 July and the vessel departed at 1330 hours. A calibration was carried out at 0500 hours on 11 July in Lough Eriboll. The survey commenced in the North Minch at 1145 hours on 11 July. Zig-zag transects, at a spacing of 15 nmi, were adopted in the Minch. On reaching the southern limit of the Minch, transects progressed northwards along lines of latitude, at spacings of 15, 7.5 or 3.75 nautical-miles (nmi). Transect spacing was based on the results of previous surveys and transects were placed relative to ICES rectangles. Transects extended as far as the shelf edge (200 m contour) to the west, and as far as safely possible to the east, on approaching the coast. A mini survey (transect spacing of 2 nmi) was conducted in the area adjacent to Barra Head, due to the exceptional concentrations of herring found. Exchange of personnel (K Peach for D Tait) took place on 19 July near Bresaclete, on the west coast of Lewis. North of the Hebrides, transects extended from the shelf edge to longitude 4° West, progressing northwards as far as 60° 07' North. The survey was completed on 26 July. A second calibration was carried out at 0800 hours in Scapa Flow on 27 July. The vessel returned to Fraserburgh in the early hours of 28 July. Scientists and gear were unloaded the following morning and returned to Aberdeen.

Results

The survey was completed successfully, with no time lost due to weather and no damage to either the acoustic gear or fishing gear. The total mileage surveyed was approximately 2,400 nmi (Fig. 1) with a total of 1,029 acoustic log intervals recorded. Two successful calibrations were carried out, which gave consistent results. Fishing exercises (Fig.1) were

generally successful; 46 trawls were taken, of which 30 contained herring. In addition to length frequency data, a total of 2,093 herring were sampled for weight, sex, maturity and otoliths.

Preliminary indications are that there were more fish than that detected in 1997: large concentrations of herring were found at Barra Head, Gallan Head and close to the shelf break at latitude 59° North. The former concentrations were surveyed quite intensely to determine their extent and distribution. Occasional large marks of herring were encountered throughout the area. A full stock estimate and survey report will be prepared shortly.

P G Fernandes
28 July 1998

Seen in draft: A Masson, Master, MFV *Kings Cross*

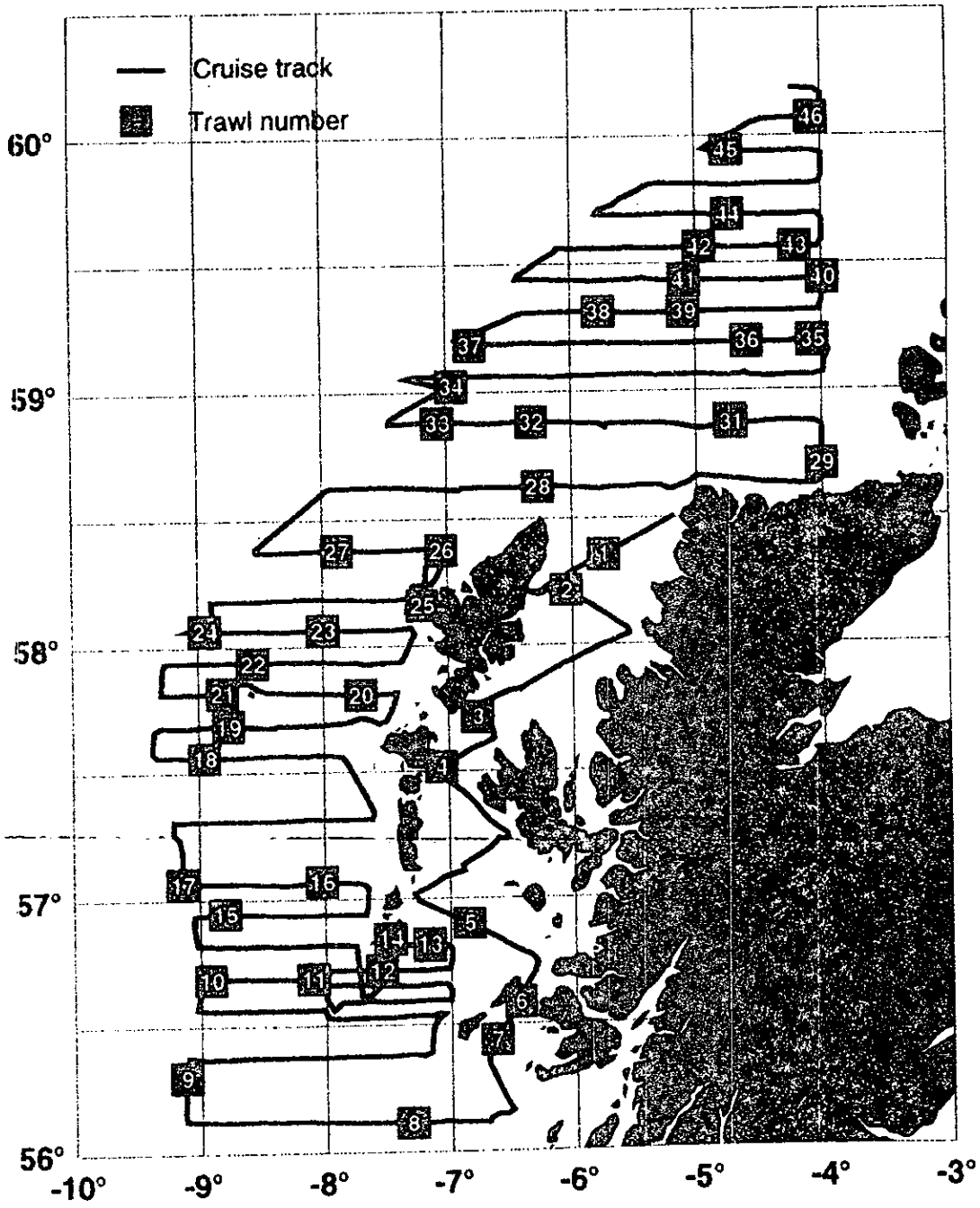


Figure 1. Cruise track and trawl positions for the 1998 west coast acoustic survey.