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

MV *Christina S*

Charter Cruise 0199H

REPORT

12-31 July 1999

Personnel

D Reid (In charge)
P J Copland
D J Beare (12-22 July)
K J Peach
~~F N Burns~~
I Garioch (22-31 July)

Half landing: Ullapool, 22 July

Objectives

To carry out an acoustic survey for herring in ICES area Via(N) as part of the ICES coordinated acoustic and midwater trawling survey in the north western North Sea and North of Scotland.
Project code MF01t

Out-turn days per project

MF01t- 19 days

Narrative

Loading of the vessel and installation of container and equipment was carried out on the 8th and 9th and completed successfully. The vessel left Fraserburgh at 1100 hours on 12 July and proceeded to Loch Eriboll for a calibration carried out overnight. Survey work began at Cape Wrath on the morning of the 13th. The survey continued in moderate to poor weather until 21 July when the vessel steamed to Ullapool for half landing and crew change. A second calibration was carried out in Loch Broom on the 22nd. This revealed problems with the towed body towing cable, which was replaced and a new cable installed and calibrated. The survey continued on the 23rd in good weather. Around the 26th the towed body cable was snagged on floating debris and was damaged, requiring replacement. This was completed and the rest of the survey was completed without incident. A final calibration of the towed body cable was carried out at Scapa Flow on the night of the 30th. The vessel then steamed to Fraserburgh for offloading on the 31st. No time was lost due to weather or mechanical breakdown. One day was spent repeating two transects west of Lewis to compare results with a complete cable and the first damaged cable.

Results

The full survey area was covered, mostly at a transect spacing of 7.5 nautical miles. Closer spacing (3.75 nm) was used in the area of Barra Head, and wider spacing (15 nm) in some areas identified as having historically low herring abundances. The survey was extended into the area between 3 and 4°W allowing an overlap with the acoustic survey on FRV *Scotia* see Figure 1. Thirty-eight fishing operations were carried out with 24 of these containing significant numbers of herring, see Figure 2. Otoliths were taken for 2,236 herring across the survey area, these fish were also scored for weight, sex, maturity, gonad weight and feeding state and gut weight if feeding. 1,142 Elementary Distance Sampling Units (EDSU) were covered at 2.5 nautical miles per EDSU, resulting in 2,855 nautical miles of survey track covered - see Figure 3. Detailed analysis of results will be carried out after otolith reading has been completed.

D Reid (Dr)
3 September 1999