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FRV Tridens (RIVO-DAFS Collaborative cruise)

Report

6 - 15 March 1985

Personnel (Marine Laboratory)

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Objective

To film square mesh codends on Scottish and Dutch commercial trawls to ascertain fish escape potential from various designs of codend.

Narrative

Tridens departed Aberdeen at 2300 hrs on 6 March to undertake RCTV work on the Bellans grounds of the Moray Firth on 7 and 8 March. Tridens returned to Aberdeen at 0930 on 9 March for her weekend off and departed Aberdeen at 2300 hrs on 10 March for Copinsay. RCTV observations of various codends continued at Copinsay until 14 March when Tridens moved back to the Bellans area where TV trials continued on 15 March. On the 13 March the vessel visited Kirkwall in order to change trawling equipment and pick up gear sent from Aberdeen. Tridens returned to Aberdeen at 0930 hrs on 16 March and the RCTV and trawl gear was unloaded on 18 March.

Results

Fifteen hours of underwater film of the codends tested on the Scottish and Dutch trawls was collected. The film is being analysed in the Laboratory. Interim results suggest that a narrow square mesh codend displays greater escape potential for haddock, whiting and herring compared to wide square mesh codends when attached to commercial trawls with long diamond mesh extension pieces. A short quickly tapered square mesh section at the forward end of the long extension created a good escape zone, but further tests will need to establish whether such a section could replace a square mesh codend.

Haddock, herring, whiting and sandeels were observed to escape in large numbers along the entire length of the square mesh sections in direct contrast to the failed attempts at escape from the closed diamond meshes in the long extensions of both trawls tested. Up to ten very large cod were observed in a square mesh codend during several hauls.

J H B Robertson
26 March 1985