R1/7

In Confidence: Not to be quoted without reference to the Laboratory 7MR80

FRV MARA

Cruise 7/80

REPORT

30 June - 25 July 1980

Objective

To obtain roundfish reactions to various parts of fishing gear using the diver's towed underwater vehicle (TUV II).

Narrative

Scientific staff joined the ship in Buckie on 30 June and sailed for the West Coast. Owing to a bad weather forecast the ship proceeded through the Caledonian Canal and arrived at the fishing grounds off Gairloch on the 3 July. The weather conditions only permitted an echosounder survey which gave encouraging traces in diveable depths. The ship then proceeded to Gruinard Bay where again an echosounder survey was made. This was followed by the diving team running along the proposed tow with the underwater vehicle. The ground had large boulders and was unsuitable for the tests. MARA proceeded to Ullapool for the weekend and returned here for the next two weekend periods.

The work commenced on Monday 7 July in the Gairloch area and continued for the next two working weeks with only short interruptions for bad weather.

Before returning to Ullapool at the weekends the opportunity was taken to survey other possible towing areas at the Isle of Martin. These grounds were rough but not impossible to work on. Haddock were observed on these grounds by the divers.

Results

Excellent films were obtained, using a hand held TV camera operated from the divers underwater vehicle, of haddock, cod, whiting and saithe in the swept area in front of the trawl. These new pictures recorded on videotape indicate that each of these species may have (unique) different patterns of behaviour as the net approaches which has not previously been seen or filmed.

The trawl was also filmed when travelling up and down a steep ridge. This showed that when the net approached the ridge from either side, the gear left the seabed and the fish herded into the mouth of the net were lost under the bobbin rig.

The videotapes are now being analysed and an edited version, showing all the important points, will be compiled.

Seen in draft J Calder

J Main 10 December 1980