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4MR78

FRV "MARA"

CRUISE 4/78

REPORT

3 - 28 APRIL 1978

Objectives

To study the fish capture mechanism by observing the reaction of fish to a four panel trawl using a low light, trawl mounted T.V. system.

Narrative and Results

"Mara" was based at Buckie from the 3rd to the 14th April, then moved to the Orkney area for the period 17th - 24th, returning to the Moray Firth to complete the remainder of the cruise.

Water clarity in the Moray Firth at the beginning was such that useful observation was impossible. This applied both inshore and offshore over the wide area in which a search was made for suitable conditions.

At Orkney, conditions were slightly better and the groundrope and lower sections of the net could be seen, but the improvement was not sufficient to allow fish reactions to be observed.

With the advent of strong East to S.E. winds underwater conditions deteriorated and the vessel returned to the Moray Firth. Here the situation had improved markedly and good quality recordings were obtained. Unfortunately there was a dearth of round fish and observations were confined to flat fish and skate. One or two good examples of the gear coming fast and also clearing obstacles were recorded.

During the cruise the opportunity was taken to test the 72' Lossie trawl designed for vessels in the 100-200 H.P. class. Towing speeds of  $3\frac{1}{2}$ -4 knots were achieved with a reduction in engine exhaust temperatures showing the net to have considerably less drag than the 86' Lossie trawl. A  $\frac{5}{4}$  hr haul with this net at Copinsay produced a catch of six baskets of haddock.

A Corrigan  
R Priestley  
8 June 1978

Seen in draft: W Mair