

CRUISE REPORT

FRV MARA

28 July - 8 August 1975

Objectives

1. To measure the net drag differentials of four panel trawls of varying mouth openings and constructed with twines of differing thickness.
2. To test the diver's distance measuring instrument.

Narrative

The scientific staff joined Mara at Buckie on Monday 28 July when the instrumentation was installed on the ship and the fishing gear made ready for sea.

The trials commenced on Tuesday 29 at the Lossiemouth test area and continued uninterrupted, apart from the week-end break, until Friday 8 August when the cruise terminated at Buckie.

The weather over the period was exceptionally good but although the sunlight intensity was high the water clarity was such that it all but precluded any useful photographic work.

Results

Work on the drag effects of varying the trawl mouth area and shape and the use of differing twine thickness in its construction was successfully completed. This information will now be used to produce an updated theoretical net drag formula.

Small haddock were present on the grounds in some quantity, and for the first time the reaction of round fish to the approaching trawl could be observed. The fish dropped back over the groundrope more quickly than was evident on the seine net trials presumably because of the comparatively higher towing speeds when trawling. Orientation and herding of the fish by the gear was seen to work well on 'with' and 'against' the tide hauls but on cross tides many fish escaped through the bridles and over the rubber legs at the wing end.

The transponder of the diver's distance measuring instrument proved to be incompatible with the rest of the system and the unit was returned to the laboratory for further modification.

Seen in draft by W T Mair.

A Corrigall  
21 August 1975