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In Confidence - Not to be quoted without reference to the Laboratory

CRUISE REPORT

FRV "MARA"

MAY 16 - JUNE 3, 1977

## Objectives

- (1) To observe the reaction of fish within the net mouth area of a four panel trawl with (a) full wing (b) flying wings.
- (2) To continue with the substitution of side panels of varying size and shape in order to study their effect on engineering performance and fish capture.

## Narrative

Before the commencement of the cruise "Mara" was required to conduct tests with salmon drift nets on behalf of the Fisheries Inspectorate. These were completed successfully off Buckie on Monday, 16 May. "Mara" sailed from Buckie to Peterhead on Tuesday, 17 May where the fishing gear and experimental equipment were loaded. Work commenced in the Cruden Bay area but underwater visibility was such that the area had to be abandoned and the vessel moved to Aberdour Bay using first Fraserburgh and then Macduff as a base till the 27 May. Water clarity in Aberdour Bay was particularly good but the lack of round fish on the ground rather inhibited the prospect of completing objective (1). For the final week of the cruise "Mara" operated from Buckie working on the test area off Spey Bay.

## Results

There was practically no round fish on any of the grounds where the gear was under trial. Limited sightings were made of the reaction to the gear of individual flat fish (Plaice and Dabs) and shoals of Sandeels. The behavioural patterns of flat fish were similar to those experienced when fishing the seine net, with the groundrope and chains herding the fish effectively.

The engineering work on the substitution of side panels of varying size has now been successfully completed, and the "Lossie" trawl can be offered with ground-rope and headline lengths to suit limiting deck layouts and the handling capabilities of some side and stern trawlers. The additional video tape aterial acquired is being analysed and extractions will be included in a tape being made up for demonstration purposes.

A Corrigall 28 July 1977

Seen in draft W T Mair