

## CRUISE REPORT

## FRV "MARA"

19 November - 21 December 1974

## OBJECTIVES:

Part I To continue the studies of juvenile plaice stocks in the Clyde by the use of a beam trawl.

Part II 1. To survey the distribution and abundance of 0-group herring and sprats in the Clyde with a mid-water trawl.  
2. To catch demersal fish by hand-line on the dumping ground off Garroch Head for pollution analysis.

"Mara" left Buckie about 0800 hours on 19 November for the Firth of Clyde by way of the Caledonian Canal. Excellent progress was made in good weather conditions and Mr Poxton and Mr Robertson were able to join the "Mara" at Troon on 21 November. Mr Moore sailed round with the boat from Buckie.

The beam trawl stations were begun on 22 November in Irvine Bay when good progress was made. Unfortunately the weather deteriorated over the weekend and "Mara" was prevented from sailing on Monday 25 November by a severe NW gale.

The beam trawl stations were completed as far as was possible in often difficult weather conditions working Heads of Ayr, Culzean Bay, Maidens Bay, Turnberry & Whiting Bay on 26 November and Irvine Bay on 28 November.

The "Mara" was prevented from working by another NW gale on 27 November and on 28 November the boat was docked in Troon to allow the crew a long weekend at home.

A changeover of gear was effected on the evening of 28 November and the scientists left the boat to travel back to Aberdeen on 29 November.

Mr McPherson and Mr Hutcheon joined "Mara" late on 2 December and trawling started the next day. Despite poor and sometimes severe weather conditions some work was possible on each day and 18 trawls were completed by Friday 13 December. It was hoped to complete the survey the following week but very poor weather conditions and an unfavourable forecast on Monday brought the trip to a close. The scientists returned to Aberdeen on Monday and "Mara" left to make a passage to Buckie and reached there on Friday 20 December.

## RESULTS:

Part I Beam trawl work for Plaice

Initial work in Irvine Bay in good weather showed that a good many 0-group plaice and dabs had moved into the deeper offshore waters.

Unfortunately most of the trip was marred by severe NW gales which led to a severe decline in catches. The biggest catches of juvenile fish were once again found in Irvine Bay which emphasises the importance of this area.

## Part 2

Herring were caught in 17 of the 18 trawls. The greatest numbers came from the trawls taken north of a line through Garroch Head with an average catch of 52 herring from 7 hauls. South of that line 11 hauls yielded only 51 herring, 4 of which were longer than 27 cm. The other herring caught ranged between 7 and 18 cm with the smallest ones (less than 10 cm) being caught in the upper reaches of lochs Long and Striven.

The distributions of sprats, mostly from 4 to 10 cm long and of T. esmarkii followed the same pattern with the largest catches in the northern part of the Firth.

The only large fish caught were saithe and 50 of these were tagged.

Attempts to catch fish by hand line on the Garroch Head dumping ground were unsuccessful because of strong winds. Some fish caught by trawl on the edge of the area were sent to the laboratory for pollution analysis.

M G Poxton  
G McPherson  
15.5.75

Seen in draft by W Mair