In confidence: Not to be quoted without reference to the Laboratory.

R1/7

8 11MR69

CRUISE REPORT

F.R.V. 'MARA'

6-17 October 1969

OBJECTIVES

To assess the relative strengths of the year classes of flatfish, especially plaice, on the nursery grounds of the Moray Firth and the east coast of Scotland.

NARRATIVE

'Mara' left Buckie at 0830 on 6 October and proceeded to Nairn Bay where 4 hauls were made. The tubular metal beam of the trawl was badly bent during the fourth haul. 'Mara' then steamed to Invergordon. While docking at Invergordon the vessel was damaged below the waterline. 'Mara' returned to Buckie on 7 October to effect temporary repairs and to straighten the beam of the trawl.

'Mara' worked in Burghead Bay on 8 October in Spey Bay on 9 October and in Cullen Bay on 10 October.

On 13 October 'Mara' steamed to Fraserburgh, samples being taken en route in Aberdour Bay. It had been intended to work in Aberdeen Bay on 14 October but SE gales prevented this. It was therefore decided to work for the rest of the cruise in the bays on the southern shore of the Moray Firth. 'Mara' worked in Pennan Bay on 14 October and in Nairn Bay on 15 October.

Steaming was delayed on 16 October while modifications were made to the towing rig of the trawl. This was necessary because the trawl had turned over on several occasions while being towed. Subsequent hauls in Cullen Bay and Spey Bay on 16th and 17 October showed that these modifications reduced this difficulty but did not entirely eliminate it.

RESULTS

The mean numbers of plaice and common dabs per half hour haul with a 16 ft beam trawl in each region were as follows:

	No. of hauls	Mean no./half hr. Plaice C. Dabs
Nairn Bay	6	4.9 30.8
Burghead Bay	8	6.2 29.1
Spey Bay	8	7.5 38.2
Cullen Bay	16	5.8 25.6
Aberdour Bay	5	9.4 51.8
Pennan Bay	2	14.0 65.0

Examinations of the length frequency distributions of the plaice caught indicates that the 1968 year class is probably a weak one.

Stomach samples were taken from common dabs during the course of the cruise.

D W ARMSTRONG 19 February 1970