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CRUISE REPORT

F.R.S. 'SCOTIA'

1st December-22nd December 1960

'Scotia' sailed from Aberdeen on the morning of 1st December for fishing grounds east of Balta. Trawling was begun on Saturday 3rd December, and four trawls were completed on that day. From Saturday 3rd to Friday 9th trawls were made in this vicinity, and also off Fetlar and Out Skerries. Fishing in general was poor, and the catches of haddock and whiting were very low, the main species caught in this period being gurnard. On two occasions, however, catches of over 400 nephrops per 1 hour haul were made approximately 7 miles east of Fetlar. Both these hauls were made shortly after dawn on the same grounds.

Bad weather on Friday 9th December prevented trawling and 'Scotia' sailed for Lerwick to pick up a courlene whole cover dispatched from the Laboratory to replace one lost on the 7th December.

'Scotia' left Lerwick on Sunday 11th for the hydrographic stations north of Flugga. Only one station was completed in a North Westerly gale, and the remainder of the line had to be abandoned. A passage was then made to more suitable fishing grounds off the East coast of Scotland. One haul was made en route off Copensay, but the quantity of fish caught did not warrant staying in this area.

On Tuesday 13th trawling was begun in the Buchan Deeps and ten hauls in all were made in this area. Haddock were also scarce on this ground, and although reasonable quantities of whiting were found they were mainly below 30 cm. The majority were escaping through the cod-ends in use, and were not suitable for mesh selection experiments. On the night of 14th a passage was made to the Firth of Forth where trawling was started on 15th off May Island. The Nephrops Survey was completed on Friday 16th, and 'Scotia' docked in Leith in order to land the relief First Officer to return to his cruiser.

'Scotia' left Leith at midnight on Saturday 17th December and trawling was resumed off May Island on Sunday 18th and continued until 22nd December, with one interruption due to thick fog on 21st. During this period whiting and cod were caught in reasonable quantities but again the whiting were too small for the cod-ends specified in the programme and a change of cod-ends was made for the last four days of the cruise to a double manila cod-end with mean mesh size of 63 mm.

In the Firth of Forth particular attention was paid to the infestation of cod with nematode worms, and samples from almost every haul were examined. In all approximately 500 cod were examined for worms.

Results

The data obtained in this cruise are not of the best quality, but on a preliminary analysis they suggest that the masking effect of the top cover with the small mesh inside blinder may be quite considerable. There appears to be very little differences between the selection factors obtained from the whole cover and the whole cover fitted with floats and chains. A fuller statistical analysis will be carried out on these data.

One very noticeable feature is the considerably smaller selection factor obtained for whiting in the Firth of Forth with the 63 mm codend, than that obtained for the other double manila codends in Shetlands and Buchan Deeps.

W. B. HALL.

1st February, 1961.

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