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CRUISE REPORT

F.R.S. "SCOTIA"

4th-25th September, 1959.

"Scotia" sailed from Aberdeen on the afternoon of 4th September and returned to Aberdeen on the morning of 6th September after having successfully completed the Fladen survey.

"Scotia" left Aberdeen again on the 8th September and made passage for the fishing grounds 3 miles east of Balta Island in the Shetlands. From the 9th-15th September comparative fishing work was done every day in excellent weather. The aim of this work was to provide data for the comparison of selection curves obtained by the covered net method using two types of cover, one over the top-side of the cod-end only and the other enveloping the whole cod-end. The cod-end used throughout was a nylon cod-end of average mesh size 66 mm. and both covers were of courlene.

Catches of haddock were generally good, consisting mainly of the 1958 brood with a modal length of 24 cm. although towards the end of this period larger fish became more plentiful. Skate were also plentiful on the grounds. Useful selection data were obtained for haddock and a preliminary assessment of the results suggest a difference in selectivity with the two types of cover, the complete cover permitting more releases than the top cover. A detailed analysis of the results is in progress.

This part of the programme was completed on the 15th September and "Scotia" docked at Lerwick that afternoon. Mr. Pope left the ship on the 16th September and was replaced by Mr. Dickson.

Trawling was resumed off Balta Island on the 17th. For the next three days measurements of the drag spread and speed of the gear were made over a range of engine speeds with both the standard V.D. Gear using 20 fm. sweeps and with 15 fm. double sweeps handled "Bang up" fashion. During this period the nylon net was used and fishing was fair to good. The weather too was good and the taking of measurements went on steadily.

As the weather appeared to be holding it was decided to test the new winch and make measurements on the gear towing in the deep water N.W. of Flugga. The measurements were made all right on 21st September, but when the gear was hauled the nylon net had been torn to ribbons by coral. A Carruthers jelly bottle lashed to the after warp near the after otterboard to measure warp declination near the bottom was also lost. The cod-end was recovered hanging by one selvedge but there was enough in it to show that the net had been fishing in 168 fathoms, which is the deepest that "Scotia" has ever trawled.

The following day, again off Balta, measurements were made on a manilla trawl of the same dimensions, still using the modified "Bang up" gear. By afternoon conditions were far from ideal, but surprisingly enough still possible for instrument work. We had the lee of the land and the sea was not too bad although the wind was at times rising to force 8. On the 23rd the weather was better and the drag spread and speed measurements were completed, using the manilla net with the standard V.D. gear. Course was set for the Firth of Forth that afternoon.

The Nephrops survey was completed during the night of 24th/25th September and the vessel docked in Leith that morning.

J. A. POPE
W. DICKSON
21st October, 1959.

CIRCULATION:

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Mr. Baird
Mr. Devlin
Mr. Paterson
Mr. Nicol (Student)
Mr. Mowat
Library (2)
File
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Mr. Dickson
Mr. Jones
F.Os - Lerwick
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