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CRUISE REPORT

F.R.S. "SCOTIA"

8th August-3rd September, 1962

Objectives

- 1) The Rattray-Fladen line.
- 2) To locate trawlable concentrations of herring for the commercial trawlers taking part in the B.I.B. experiment.
- 3) To trawl alongside one or more of the trawlers.

"Scotia" sailed from Aberdeen on the evening of 8th August to carry out the Rattray-Fladen line and returned in worsening weather on the 10th. She sailed again on 12th August and surveyed the area from Bressay Bank north to the Bressay Ground and westwards to Fair Isle and Shetland, before calling at Lerwick for water on the 16th. After leaving Lerwick on 18th August, she continued the survey from the Bressay Ground eastwards and to the south of the Fladen ground, where she trawled alongside the "Star of Devon" for 24 hours. She then surveyed eastwards to the Ling Bank and Coral Bank and back westwards to the north edge of the Fladens. The weather then broke down and "Scotia" dodged for 24 hours before returning to Aberdeen on 24th August.

The survey was resumed on 27th August in the Aberdeen Bank-Fladen area. Reports of good herring fishing in the Farn Deeps area led to a change of plan, however, and "Scotia" echo-sounded from the Fladen down the Gut and on to the grounds to the east of Farn Deeps where she found a large concentration of foreign trawlers.

"Scotia" surveyed the extent of the concentration and observed the activities of the trawlers for two days and then joined "Grampian Glen" to the east of Berwick Bank to trawl alongside her for 24 hours before docking in Leith on the evening of 3rd September.

Echosounding

No dense concentration of large herring traces was found. A moderate concentration of small traces was located over several days on the north edge of the Fladen ground between 58°30' and 59°N and between 00°30' and 1°E. In the area east of the Farn Deeps where the trawlers were fishing, three large plumes were seen and several tick traces but there was no large concentration of traces.

Trawling

The gear used was the herring Vinge trawl used without bobbins.

Herring were caught in 37 of the 46 hauls but in small numbers: between 1 and 25 herring were caught in 27 hauls, between 50 and 100 in 8 hauls, and in 2 hauls only were there enough herring to be measured in baskets. One haul of 2½ baskets was taken on the North Fladen area where echo traces were found. The other large haul (5 baskets) came from among the foreign trawlers working to the east of Farn Deeps.

The herring caught in the northern area were mainly large fish (modal length 29-30 cm) either maturing or spent, but there was a fair number of immature herring (modal length 21 cm) caught in the North Fladen area. The modal length of the herring on the southern ground was smaller at 27-28 cm but the maturities were the same.

Large numbers of small haddock between 11 and 16 cm were caught to the east of Fair Isle and Shetland and on the south edge of the Fladen. Haddock of marketable size were prominent in many of the hauls both in the north and south and were usually more numerous than whiting.

The distribution of Gadus esmarkii was spotty. In some hauls the species was barely represented while in other hauls in the same area it supplied the bulk of the catch (16 baskets out of a total of 17 in one haul).

GEORGE McPHERSON.
16th November 1962.