

DC

MINISTRY OF AGRICULTURE FISHERIES AND FOOD
FISHERIES LABORATORY LOWESTOFT SUFFOLK ENGLAND

1974 RESEARCH VESSEL PROGRAMME

REPORT: RV CIROLANA: CRUISE 6A

(PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF

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DURATION

Left Grimsby 0600 h 4 July
Arrived Stornoway 0727 h 16 July
All Times are Greenwich Mean Time

LOCALITY

North Sea - Faroes

AIMS

1. To carry out the international 0-group survey around the Faroes
2. To collect seawater samples for the estimation of Caesium 137 and trace elements.

NARRATIVE

Departure was delayed firstly by a bomb hoax which prevented CIROLANA from leaving Immingham dry dock on 1 July and secondly by a steering fault which developed during the passage from Immingham to Grimsby. CIROLANA eventually sailed at 0600 h 4 July and started the sea water sampling stations at 0800 h. During the steam northwards the echo sounder equipment was calibrated and noise measurements were made. A fault developed in the MS29 recorder and a short diversion had to be made to pick up a replacement transformer from Kelvin Hughes' Shetland agent, via the Lerwick pilot boat at 1732/5. Water sample stations were resumed at 2059/5 and the starting point of the 0-group survey was reached at 1400/6. Thereafter fishing continued without interruption until a grid of 83 stations was completed at 0830/5. Course was then set for Stornoway. Deep water samples were taken on passage before Stornoway was reached at 0727 /16. Scientific staff left Stornoway by air at 1240/16.

RESULTS

AIM 1 The 0-group survey over Faroe Bank and Plateau was completed successfully. 83 hauls were made with the Capelin trawl and the echo-integrator was run during fishing and between stations. As on the previous two surveys highest concentrations of fish were found in the stations closest to the islands, but the distribution of cod and haddock differed somewhat from earlier surveys.

Cod: The highest catch of cod was 7000 per half-hour tow compared with 26000 in 1973, but more than 1000 were caught at several stations. The area of highest density extended much further west than in 1972 and 1973. Few cod were caught on the southern part of the plateau. Only 81 cod were caught on Faroe Bank, 69 of them in one haul, compared with a total catch of 744 in 1973.

Haddock: These were very widespread. Highest concentrations on the Plateau were found east of the islands as in the previous surveys, but in addition there was a large area west of the islands where more than 100 were caught per half-hour tow. In contrast to the 1972 and 1973 surveys, a small area of high concentration was recorded in Faroe Bank where the maximum catch was 2328 compared with 361 in 1973. Norway pout and sandeels were caught in large numbers and high concentrations extended further west than in earlier surveys. Echo integrator levels were recorded throughout the survey but the results await analysis.

AIM 2 Surface samples for trace element and Caesium 137 estimation were collected at 40 stations during the passage to the Faroe area, during the survey, and on passage to Stornoway. At six of them deep samples were taken in addition to the surface samples.

3 Miscellaneous

- A Noise levels at the transducer were measured for a range of ship's speed from 0-15 knots.
- B Samples of echo amplitude and number distribution were obtained at a number of stations in addition to the integrator results. Specimens from the catch were preserved for laboratory tests on target strength.
- C The Elac cable winch worked well once minor problems on the method of attachment to the net were overcome.
- D Temperature and salinity observations at 0 and 50 metres were made at all survey stations. Surface temperatures were nearly 2°C warmer than in 1973 probably because of the relatively calm weather which persisted for most of the cruise.

R W Blacker
27 July 1974

SEEN IN DRAFT C W A

INITIALLED A J L

DISTRIBUTION

Basic List

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