

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1976 RESEARCH VESSEL PROGRAMME

REPORT: RV CIROLANA: CRUISE 8

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

STAFF

- B W Jones
- M R Vince
- R N Tucker
- K Medler
- T W Boon
- P Hudson
- J D Webb
- S Ridgeway (WFA)

DURATION

Left Grimsby 1230 h, 20 August

Arrived Leith 0130 h, 12 September

All times are Greenwich Mean Time.

LOCALITY

Barents Sea

AIMS

1. To participate with vessels from Norway and USSR in the International Barents Sea 0-group fish survey.
2. To work hydrographic sections associated with our part of the survey grid.
3. To collect seawater samples for caesium-137 studies.

NARRATIVE

The ship sailed from Grimsby at 1230 h, 20 August and made directly for our starting point on the survey grid on the northern coast of Norway. After a good passage work commenced at 0430 h, 25 August and the survey was completed at 0230 h, 7 September. During this period work was interrupted four times by adverse weather resulting in the loss of a total of 77 hours. Due to the bad weather the two northernmost hydrographic sections and part of the survey grid off NW Spitsbergen had to be abandoned. During the period of the survey regular radio contact was maintained with the other ships with twice daily exchanges of data. On termination of the survey CIROLANA called at Hammerfest on 7 September arriving at 1030 h and sailing at 1620 h. Mr Jones left the ship at Hammerfest to join scientists from the other participating vessels to analyse the survey results and prepare a joint report.

Due to adverse weather conditions a passage was made through the fiords to Marston where the pilot was dropped at 1810 h on 10 September. CIROLANA docked at Leith 12 September at 0130 h.

RESULTS

1. The 0-group fish survey was successfully completed although bad weather restricted the area covered North-west of Spitsbergen. CIROLANA covered 2000 miles of survey grid and made 59 hauls with the Capelin trawl. The other ships participating in the survey were G.O. SARS and JOHAN HJORT from Norway and ODESSEY and FRITJHOF NANSEN from USSR.

Cod and haddock were distributed over areas similar to those recorded in 1974. No cod were caught in the Svalbard area. The abundance of cod was low and was similar in abundance to the 1974 year-class. Haddock on the other hand were again abundant, this being the third successive good year-class recorded in the 0-group surveys, although the year-class strength was below the very abundant 1974 and 1975 year-classes. Redfish were again very abundant and the year-class strength as 0-group fish is comparable with the 1974 year-class which was the largest recorded in these surveys. Compared with last year there were fewer redfish in the Svalbard area. The distribution and abundance of capelin were similar to last year and the 1976 year-class appears to be a good one.

Polar cod were incompletely surveyed in the eastern (Novaya Zemlya) area, but in the Svalbard cold water area their above average abundance was similar to last year.

Long rough dab were as usual widespread but at a low density. Greenland halibut were recorded in the Svalbard cold water, and small numbers of mackerel were caught off the northern coast of Norway.

For the first time in many years 0-group herring were taken in significant numbers in an area extending in a narrow band off the northern Norwegian coast. Adult blue whiting were widespread and exhibited a clear diurnal vertical migration coming right up to the surface at night.

2. 27 hydrographic stations were worked on four sections, sampling for temperature and salinity at standard depths down to 500m maximum.

3. 50 l water samples for Caesium-137 studies were collected at 1° latitude intervals from 65°N to 75°N. A salinity sample was taken at each water sample station.

MISCELLANEOUS

Samples of krill were frozen for fish food for Dr Purdom.

B W Jones
17 September 1976

SEEN IN DRAFT: TCF
WJS

INITIALLED: DHC

DISTRIBUTION: Basic list +

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