

Provisional: Not to be quoted without reference to the writer

R V CORELLA

Report for Cruise 14/1969

Staff: P O Johnson
B H Holford
J Dann
R Hurst

Duration: 5-18 September

(All times B S T)

Aims

1. To carry out a high speed tow-net survey for herring larvae around the Shetland Islands over the ICES station grid, and if time permits a similar survey over the inshore portion of the Whitby area grid.
2. To carry out experiments on the escape of small larvae through various sizes of mesh.
3. To collect samples of herring from commercial landings at Lerwick for routine biological analysis, with stratified samples for Dr Greer Walker.

Narrative

CORELLA left Lowestoft at 1600 hours on 5 September and set course for the Shetland Islands. A good passage was made during which a series of free-flow calibrations were carried out on townets and flowmeters. Tow-netting commenced just to the west of Fair Isle at 1410 hours on 7 September. Only two stations had been completed when deteriorating weather from the southwest forced the vessel to seek a more sheltered area of operation on the east side of the Shetlands. Work was able to continue in this region until 1400 hours on 8 September when strong winds forced the vessel to an overnight anchorage in a small bay on the north side of Fetlar Island. Work recommenced the following morning and continued until the evening when further strong southerly winds caused overnight dodging. The remainder of the eastern sector of the grid was then completed between 10-11 September in moderate weather. A strong northeasterly wind developed during the night of 11/12 September and this forced the vessel to break off the survey and seek shelter off the west Shetland coast. CORELLA then proceeded to Lerwick on the morning of 12 September, berthing there at 0915 hours. Samples of herring from the commercial landings were obtained whilst in port, the ship leaving Lerwick at 1000 hours on 13 September and completed the western half of the survey grid in very fine weather conditions between 13-15 September.

CORELLA then set course for Lowestoft at 0430 hours on 15 September, and was making a very good passage when at 1850 hours the ship suddenly suffered a reduction in speed to 8 knots together with a breakdown of the log, which was found to have been snapped off. It was soon apparent that the propeller and shaft had become fouled by some floating debris and after contacting the Marine Superintendent at Lowestoft we were advised to proceed to Aberdeen to have the propeller examined by divers. The ship arrived there at 0230 hours on 16 September and two divers went down at 0800 hours. They removed a large section of "Drilene" trawl netting which had become tightly entangled around the propeller shaft. Dock trials on the steering and propeller settings proved satisfactory and the vessel left Aberdeen at 1000 hours the same

morning. The return passage was resumed under favourable weather conditions but at 2300 hours that evening very dense fog was first encountered, the vessel then being off the Tyne. This continued unabated for the remainder of the home journey and caused serious delay due to the need for greatly reduced speed. Visibility was often down to 50 yards or less and at best only amounted to a few hundred yards. CORELLA finally berthed at Lowestoft at 1300 hours on 18 September after an overnight anchorage in Corton Roads.

Results

A total of 51 townet stations was successfully completed around the Shetland Islands. A cursory visual inspection of the preserved samples suggested that clupeid larvae were not abundant on most of these stations.

Samples of herring from both the east and west Shetland grounds were obtained from commercial landings and deep frozen on ship after being measured, whilst additional stratified length groups were preserved in 4% formalin for Dr Greer Walker. The Shetland herring season has now nearly ended with only a few vessels remaining in the fishery. The echo-survey records indicated a fairly widespread but thin patchy distribution of pelagic shoals around the Islands with no signs of any large localised concentrations. A large Russian mother-ship and fleet of drift-netters were seen operating in the vicinity of Bressay Bank.

The other aims in the programme were not fulfilled due to either lack of time or suitable opportunity.

P O Johnson
18 September 1969

Seen in draft: A E
C R S

Initialled: H A C

Distribution:

Basic list, plus the following:

Dr Johnson
Mr Holford
Mr Dann
Mr Hurst